UNDERSTANDING CUSTOMER EXPECTATIONS OF COMMUNITY PHARMACY SERVICES

By

BARBARA F. BRICE

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2000

Copyright 2000

by

Barbara F. Brice

This project is dedicated to Lee, Kate, and Rob. Their love supports and guides me always.

ACKNOWLEDGMENTS

This project could not have been completed without the support and guidance of my committee chairperson, Dr. Earlene Lipowski, who allowed me the freedom to explore and to choose a research method that best fit my and the project's needs. She fully supported my research journey and has given me a wonderful example to follow. Thanks also go to Dr. Sally Hutchinson, who applied her expertise and who kindly joined in and supported my exploration of grounded theory. I thank my other committee members, Dr. Carole Kimberlin and Dr. Richard Segal, for their time, help, and support. I thank Dr. Doug Ried for his time and input. I am especially thankful for my family, Lee, Kate, and Rob. Their love and support cannot be measured or described adequately enough. I thank my parents, Bob and Vera Flynn, for creating in me a need to read. I am very grateful for the support of my friends, Suzi Maue and Sabrina Scott. As fellow graduate students they understood my needs. I also thank all of my fellow pharmacy administration graduate students. I thank all of the folks at Mandarin Presbyterian Church. Their prayers and encouragement made a difference. I thank Delayne for all of the transcription work, and Debbie for being my phone buddy. I thank Bruce Allen for helping me draw the model. I thank Drs. Jerome Hallan, Nick Wilson, and Larry Jean, faculty members in the College of Health at the University of North Florida. It was their encouragement that led

me to apply to the University of Florida. I thank Mel and Dennis, for allowing me access to their customers and their practices. I thank Leanne and Traci for allowing me to observe. I thank Broni for sharing her pharmacist tools. A capital thank you goes to all pharmacy customers. Clearly without them there would be no project. Finally, I am most grateful to God who led and continues to lead me on my path through life.

TABLE OF CONTENTS

page

ACKNOWLEDGMENTS iv

ABSTRACT viii

CHAPTERS

1 INTRODUCTION 1

Problem Statement 3
Theoretical Perspective 4
Research Purpose 7
Significance for Pharmacy 7

2 LITERATURE REVIEW 8

Service Quality 11
Expectations 23
Summary of Literature Review 39

3 METHODS 41

Research Design 41
Sample 42
Data Collection and Recording 47
Data Analysis 49
Scientific Rigor 52

4 FINDINGS: A MODEL OF PHARMACIST INTERCEDING 55

Customer Needs: The Basic Social Problem 56
Antecedent Conditions for Pharmacist Interceding 64
Summary 68

5 PHARMACIST INTERCEDING 69

Assessing 69
Acting 70
Conditions Influencing Pharmacist Interceding 75
Summary 81

6 THE CONSEQUENCES OF PHARMACIST INTERCEDING 82

Professional Relationships 82
Personal Relationships 83
Cases 83

7 SUMMARY AND RECOMMENDATIONS 94

Summary 94
Model of Pharmacist Interceding 95
Relationship of the Model of Pharmacist Interceding to Other Research 97
Limitations 98
Recommendations for Pharmacy Practice 99
Recommendations for Future Research 99

REFERENCES 101

APPENDICES

A INITIAL INTERVIEW GUIDE 106

B REVISED INTERVIEW GUIDE 107

C DEMOGRAPHIC AND PHARMACY EXPERIENCE QUESTIONS 109

BIOGRAPHICAL SKETCH 110

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

UNDERSTANDING CUSTOMER EXPECTATIONS OF
COMMUNITY PHARMACY SERVICES

By

Barbara F. Brice

May 2000

Chairperson: Earlene Lipowski
Major Department: Pharmacy Health Care Administration

Customers of health care have often been ignored when assessing the quality of the medical care that they receive. Historically, customers simply followed doctor's orders and did not participate in assessing the quality of the care that they received. As the focus of the health care system in general and pharmacy in particular evolves, both are making strides toward including the customers' perspective when assessing quality. However, current efforts to include the pharmacy customer in quality assessment seem to lack a theoretical underpinning. Therefore the purpose of this grounded theory research was to generate a substantive theory that explains customer expectations of community pharmacy services, as those expectations may be a foundation on which to measure service quality. A convenience sample of 27 community pharmacy customers was interviewed. In addition, observations of the pharmacist-customer interaction took place in four

community pharmacies. Data were collected and analyzed using the grounded theory method. Findings show that pharmacy customers participate in a medication use system that they do not fully understand. This misunderstanding creates needs, the basic social problem, for those customers. Included are needs for information, needs for a problem solver, and needs for reassurance. This set of needs is addressed by the pharmacist acting on the customer's behalf in the medication use system. The pharmacist's acting, called interceding, is the basic social process that occurs in response to the customers' needs. However, two conditions, need identification and pharmacist expertise, must precede pharmacist interceding. Because interceding is a process, two phases occur: assessing and acting. Also, several conditions influence interceding. They include pharmacy environment, time, social structural variables, and personal characteristics. The consequence of pharmacist interceding is the formation of a relationship between pharmacist and customer. The proposed Model of Pharmacist Interceding illustrates the connection between customer needs, pharmacist interceding, and the pharmacist-customer relationship. Understanding the Model of Pharmacist Interceding provides pharmacists with new insight into the needs created by the medication use system for their customers. It shows pharmacists that customers expect their intercession in this system, and it demonstrates that a relationship is the consequence of pharmacist interceding.

CHAPTER 1
INTRODUCTION

This is a study of customer expectations of community pharmacy services. It is a study that seeks to create a theoretical understanding of customer expectations that is not yet found in the academic literature. The following paragraphs outline the importance of including the customer's perspective in assessing health care, and the current study of customer expectations in an effort to support the importance of understanding those expectations.

Customers of health care have often been ignored when assessing the quality of the medical care that they receive (Davies and Ware, 1988). In fact, during the 1980s the health care community focused on containing skyrocketing costs. Little attention was paid to anyone's assessment of quality of care. However, the tide has turned and health care customers, providers, and payers seem to have refocused their interests toward the quality of the health care that they receive, provide, and pay for. This renewed interest in quality leads us to an examination of the roles that customers, providers, and payers can and should take in assessing and defining quality.

Historically, customers of health care played a passive role in assessing the quality of their care. They simply followed the "doctor's orders." Patients did not participate in assessing the quality of the care that they received. In fact, there was an argument against

customers evaluating their own health care. The validity of customer ratings of health care was questioned on four points: (1) the data provided by customers reveals more about the customer than the quality of care; (2) customers are able to tell how much was done, but not how well it was done; (3) customers' and physicians' judgements regarding quality are different; and (4) customers' ratings of quality just reflect whether their provider was nice (Davies and Ware, 1988). However, in a review, Davies and Ware (1988) consider the evidence both for and against customer participation in quality assessments of care. The evidence collected in their review suggests that data from health care customers can be useful in assessing the quality of medical care. For example, they found that for common problems customers can distinguish between good and less than good technical aspects of care. Also, customers' perceptions of quality affect their choice of health care provider. Finally, they found that customers are the best source of data on the interpersonal aspects of care (Davies and Ware, 1988).

Kaplan and Ware (1995) also discuss the patient's role in health care quality assessment. They suggest that there are five reasons to include patients in the evaluation of their care. First, they suggest that patients' evaluations are the most practical source of information. Second, patient or customer satisfaction with services has been shown to affect both the patient-physician relationship and the patient's health status. Dissatisfied patients change physicians, change health plans, sue their providers, do not follow treatment recommendations, and avoid medical care altogether. Third, they indicate that research has shown a link between clinical measures of health and patient-reported outcomes. Fourth, they suggest that there is evidence that patients want to expand their

role in their health care, and that they want to receive more information from their providers. Finally, Kaplan and Ware suggest that if patients are not satisfied with their care, they may turn to alternative therapies and/or therapists.

As the health care system and its focus on quality evolves, it is apparent that the customers' role in assessing their quality of care has become increasingly important. For example, the American Medical Association Council on Medical Service includes the patient's informed cooperation and participation in decision making as an element of quality medical care (Council on Medical Service, 1986). Also, Christensen and Penna (1995) suggest that health care quality includes patients' expectations. In addition, Holdford (1999) examined the relative importance of functional and technical quality on patient perceptions of pharmaceutical service quality. Finally, Nau (2000) investigated patients' perceptions of the benefits of participating in pharmaceutical care services.

Problem Statement

While health care in general and pharmacy in particular are making strides toward including the customer's perspective when assessing quality, the task is not complete. Current research efforts aimed at defining service quality and/or customer satisfaction have provided a complicated mix of results. However, one thread seems to weave through the research and may be a foundation on which to build measures of service quality and customer satisfaction. That thread is customer expectations. In other words, the customer expectations construct is repeatedly found in studies concerning service

quality and customer satisfaction. Because of its seemingly foundational role, a clear theoretical understanding of the expectations construct may lead to more useful definitions of service quality and customer satisfaction.

Research centering on customers' expectations may be found in many disciplines, including marketing and pharmacy. However, like service quality, no consensus has been reached on a theoretical definition of the expectations construct. Because the expectations construct has been a frequent topic of research, and because clarification of the construct is needed, the grounded theory method provides an effective way of examining customer expectations. Grounded theory will provide a better understanding of how customers think about their interactions with their pharmacist(s), and what those customers expect from the interactions.

Theoretical Perspective

Symbolic interactionism, the sociological roots for the grounded theory method, finds its foundation in the work of Herbert Blumer. Blumer (1969) originally coined the label, symbolic interactionism, as a way to describe a particular approach to the study of human conduct and group life.

Blumer (1969) suggests that symbolic interactionism rests on three premises. The first is that humans act toward things or objects based on the meanings that the things have for them. These objects include everything that people find within their world, ranging from physical objects such as a football to guiding ideals such as honesty. The

meanings of things to people are central in their own right and cannot be ignored when studying human behavior. Blumer (1969) suggests that to disregard the meanings of things in favor of factors declared to produce behavior is a serious neglect of the role of meaning in the formation of behavior.

The second premise, according to Blumer (1969), is that the meaning of things derives or arises from the social interaction of people. Therefore, meanings are social products. They are created through the defining activities of people as they interact.

Finally, Blumer (1969) states that meanings are handled and modified by an interpretive process that is used by individuals as they deal with the things that they encounter. There are two steps in the interpretive process. First, through a process of self-communication, an individual points out to himself the things that have meaning. Second, through this process of self-communication, interpretation becomes a matter of handling meanings. The individual acts to select, check, suspend, regroup, and transform meaning based on the situation. Therefore, interpretation is a formative process in which meaning is used and revised as necessary for guiding and forming action. Meanings perform a part in action through the process of self-interaction.

Blumer (1969) suggests that as a human society, people are engaged in living through symbolic interactionism. Living is a process of ongoing activity in which humans develop lines of action for the many situations they encounter. People are involved in an immense process of social interaction to which they must fit their developing actions. Through the process of social interaction, individuals indicate to others what to do, and, in turn, interpret the indications made by others. Humans live in a world of objects or things,

and they are guided in action and orientation by the meaning of those things. Meanings of those things, including themselves, are formed, sustained, weakened, and transformed through social interaction. Because people cluster in different groups, have different occupations, and belong to a myriad of associations, they approach each other differently, live in different worlds, and are guided by different sets of meanings.

Symbolic interactionism provides the foundation for the grounded theory method, and as such guides the research questions, the interview questions, the data collection strategies, and the data analysis techniques of the method. The grounded theorist searches for the social processes present in human interaction. Grounded theory is useful in studies where little is known about a particular subject or where much is known but clarification is needed. Because grounded theory uses an inductive, from the ground up approach, a new understanding of behavior may emerge, and the generated theory will be inherently relevant to the world from which it emerges (Hutchinson, 1993).

In this study, the interaction between community pharmacy customers and their pharmacist(s) was investigated using the grounded theory method. Grounded theory research endeavors to understand the common issues facing the group of people under study. A group's common experience leads to shared meaning and behaviors which in turn leads to a specific social psychological problem. While this basic social problem is shared, group members may not be able to articulate it. It is the job of the grounded theorist to uncover the problem. Therefore, pharmacy customers were interviewed and observed in order to identify and understand the basic social problem they face, and the basic social process used to address that problem. The data collected from the interviews and

observations provides a better understanding of how pharmacy customers interact with and assign meanings to their interactions with their pharmacist and the medication use system.

Research Purpose

The purpose of this study was to build a substantive theory that explains customer expectations of community pharmacy services.

Research Questions

1. What is the basic social problem faced by community pharmacy customers?
2. What basic social process is used to address this problem?

Significance for Pharmacy

Findings from this study will be useful on several fronts. First, the grounded theory will provide pharmacy researchers with a common starting point for future expectations research. Second, because the theory is specifically focused on the expectations of community pharmacy customers, community pharmacists will be able to use the theory as an aide in examining their own practices. Finally, understanding customer expectations may enable pharmacy educators to develop better tools for telling pharmacy customers about the services their pharmacist may provide.

CHAPTER 2
LITERATURE REVIEW

Like all professions, the practice of pharmacy continually evolves. As the profession changes so do the interactions between pharmacist and customer, and a change in the way that pharmacists and customers interact may affect customer expectations. Four events seem to be shaping the current practice of community pharmacy, and therefore customer expectations. Those events are: (1) the arrival of pharmaceutical care, (2) the Omnibus Budget Reconciliation Act of 1990, (3) managed care, and (4) the shift toward an emphasis on quality of care. Each is discussed in turn.

In their 1989 article, Hepler and Strand suggest that pharmacy adopt pharmaceutical care as the philosophy of practice. They define pharmaceutical care as "the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life" (p. 12). In order to accomplish this, the pharmacist must perform certain activities for the patient. These activities include: curing a disease, eliminating or reducing symptomatology, arresting or slowing the disease process, and preventing the disease or symptomatology. Pharmacy and its professional associations have embraced this concept as the philosophy of practice. In fact, pharmaceutical care has become its own industry. Some companies (e.g., Caremark) have been formed for the purpose of "teaching" pharmacists to perform pharmaceutical care.

Also, colleges of pharmacy have begun to revise their curricula so that newly graduated pharmacists are better prepared for the new practice style.

The Omnibus Budget Reconciliation Act of 1990 (OBRA) specified that pharmacists meet certain requirements each time a prescription is dispensed to a Medicaid patient. Those requirements involve: record keeping, prospective drug use review, and patient counseling. In turn, states have revised their pharmacy practice acts to mandate those services for all pharmacy patients. Complying with OBRA requirements caused some pharmacists to review and adjust their practice flow. For example, in order to better provide patient counseling, some pharmacists have rearranged their practice flow so that they are now the first and last contact for patients. In some pharmacies a separate counseling area has been constructed.

The introduction of managed care into the pharmacy marketplace has also impacted the profession and its relationships with its customers. Participation in managed care contracts changes from year to year, leaving the pharmacy customer no choice but to change pharmacies. Formularies, put in place by managed care organizations to contain costs, may have an adverse effect on the pharmacist - customer relationship. Pharmacists must act as a kind of "enforcer" of the formulary. Physicians may begin to feel that the pharmacist only calls to question their choice of therapy, not to act as a therapy consultant.

Finally, health care, including pharmacy, has begun to examine the quality of care provided. Several groups have an interest in pharmacy quality of care, each with their own agenda. Regulatory agencies are charged with public safety. These agencies work to

set a minimum level of performance for practitioners. Pharmacists must meet their requirements. Also, many organizations are developing report cards of pharmacist performance. These report cards measure performance on items such as generic substitution, significant drug interventions, and avoidance of therapeutic duplication (Pisano, Tocco, and Vogenberg, 1997).

Examination of these four events shows a common thread running throughout. That is, each affects the pharmacist-customer relationship in some way. Pharmaceutical care works to increase the interaction between pharmacist and customer. Regulatory agencies specifically direct some of the interaction between pharmacist and customer. Managed care has perhaps interfered with the relationship by changing the pharmacist into an insurance benefits policeman. Finally, the advent of the service quality paradigm emphasizes the importance of the inclusion of the customer in care decisions. This examination leaves us with the question, what does the customer think? If these factors have affected the pharmacist-customer relationship, what is it that pharmacy customers expect, and why are those expectations important?

The remainder of this chapter will explore those questions by presenting the theoretical literature which explores some of those factors. Specifically, the service quality and expectations literature will be presented as background supporting the need for a study of customer expectations of community pharmacy services.

Service Quality

Research in the area of service quality began in earnest in the mid 1980s when Parasuraman, Zeithaml, and Berry (PZB) presented their conceptualization of the service quality construct. Since that time the service quality literature has grown, with the predominant focus on the foundation work of Parasuraman, Zeithaml, and Berry. In the sections that follow, readers will find an overview of the work completed by service quality researchers. This overview is presented so that the reader may gain an understanding of the background work that supported the need for this study.

Parasuraman, Zeithaml, and Berry

The theoretical framework from which this study evolved was developed in 1985 by PZB, and is part of a stream of research that this group of authors has continued to follow to date. PZB found that "quality is an elusive and indistinct construct" (p. 41) which is not easily described by customers. Therefore, PZB planned a research agenda to fill in the holes of service quality research. Their initial work included a review of the studies investigating service quality, a report of the results of an exploratory investigation of service quality in four businesses, development of a model of service quality, and suggestions for future research.

PZB (1985) found that service quality had been the topic of few other research agendas. However, they did note that there seemed to be three underlying themes in the service quality literature: (1) customers may have a more difficult time evaluating service

rather than goods quality; (2) customer's perceptions about the quality of a service come from a comparison of their expectations with actual service performance; and (3) both the performance and outcome of the service encounter are part of the customer's quality evaluation. These underlying themes and the lack of a conceptual foundation for service quality led PZB to an exploratory qualitative study.

So that they might lay the groundwork for a conceptual framework of service quality, PZB (1985) conducted an exploratory study of service quality. This study consisted of in-depth interviews with executives and focus group interviews with customers. Although the authors proposed a common set of service dimensions for all service providers, the service categories investigated in this research included retail banking, credit card, securities brokerage, and product repair and maintenance. Participating executives were selected from the customer relations, marketing, operations, and senior management departments of each firm. Three to four executives with titles such as president, director, and senior manger participated from each firm. A total of fourteen executives were interviewed about a broad range of service quality issues.

Customers were interviewed in a series of twelve focus groups. Focus group participants were screened to ensure that they were users of the service in question. The groups were designed to maintain homogeneity and assure maximum participation. Questions for the focus groups covered such topics as descriptions of an ideal service, factors important in evaluating a quality service, and the role of price in service quality.

The results of both the executive and the customer focus group interviews led PZB to the development of the Service Quality Model (SQM). The model is formed by a series

of gaps between perceptions (both management and customer) of service quality and actual delivery of the service. The gaps may be characterized as follows:

GAP 1: The marketing information gap is the difference between customer expectations of service and management's understanding of those expectations.

GAP 2: This gap, the standards gap, is the difference between management's understanding of customer expectations of service and the service standards which they specify. That is, this gap is a function of management's knowledge and use of customer expectations of service.

GAP 3: The third gap is the difference between service performance specifications and the actual performance of service. This is referred to as the service performance gap.

GAP 4: The communication gap is the difference between communications to customers about the service and the actual performance of the service.

GAP 5: The final gap is a function of the previous four gaps. This gap is the difference between customer expectations of service and their perceptions of actual service. The authors define perceived service quality with this gap.

Examination of the five gaps shows that customer expectations are an integral component of Gaps one, two, and five. It could also be argued, that while not explicitly stated, customer expectations are a component of Gaps three and four. That is, according to the model, service performance specifications from Gap three are built on customer expectations. Also, the communications made to customers, found in Gap four, may affect those customers' expectations.

The customer focus group interviews also provided a set of ten categories by which service quality was evaluated. These categories were reliability, responsiveness, competence, access, courtesy, communication, credibility, security, tangibles, and understanding/knowing (PZB, 1985). The authors suggested, in this work, that development of a measure of service quality that encompassed these ten categories or dimensions was appropriate. Also, they concluded, work was needed in developing measurements of the gaps and the importance of each gap in determining quality. Research regarding the impact of past experience, word of mouth communication, and personal needs on expected service was necessary. Finally, the authors suggested that it might be useful to segment customers on the basis of their service quality expectations (PZB, 1985).

Zeithaml, Berry, and Parasuraman (1988) continued the development of the Service Quality Model by identifying a set of factors which might affect the magnitude and direction of the first four gaps in the model. Once again the authors conducted an exploratory study. This time the first stage of the study consisted of in-depth interviews with three to four executives in each of four nationally recognized service firms. Interview

questions were open-ended, and covered a wide range of service quality issues. The second stage of the research was a comprehensive case study of a bank. Employees at every level were interviewed. The third stage of the research process was a systematic group interview with eleven senior managers of six national service organizations. The insights gained from the three stages of the exploratory study were combined to suggest the main theoretical constructs and variables associated with each of the four gaps in the SQM.

The marketing information gap was associated with marketing research orientation, upward communication, and levels of management. The standards gap was associated with management commitment to service quality, goal setting, task standardization, and perception of feasibility. The service performance gap was associated with teamwork, employee job fit, technology job fit, perceived control, supervisory control systems, role conflict, and role ambiguity. Finally, the communications gap was associated with horizontal communication, and propensity to overpromise.

The authors suggested that the model be tested with a technique such as LISREL. Perceived service quality as measured by SERVQUAL (Gap 5) would be the unobservable dependent variable, and the remaining four gaps would be the unobservable independent variables. Other suggestions for future research included: (1) determining which of the gap(s) is/are critical in explaining the variation in service quality; and (2) determining the organizational factors that are responsible for the size of the four gaps.

SERVQUAL, a multiple item scale, was developed by PZB (1988) in order to assess customer perceptions of service quality. The authors based the initial development

steps on their earlier work in service quality (PBZ, 1985). They began with a definition of service quality as the discrepancy between customers' expectations of a firm's service and customers' perceptions about the actual service. In their 1985 article PBZ identified ten dimensions of service quality. Those ten dimensions served as a starting point for item generation. A ninety-seven item instrument was developed and subjected to two stages of data collection. As a result of the two stages of data collection a twenty-two item, five dimension scale emerged. The dimensions included: tangibles, reliability, responsiveness, assurance and empathy. Tangibles are defined as the "physical facilities, equipment and appearance of personnel" (p. 22). Reliability is defined as the ability to execute the promised service accurately and dependably. Responsiveness is the "willingness to help customers and provide prompt service" (p. 22). Assurance requires knowledgeable and courteous employees with an ability to inspire trust and confidence. Finally, empathy is the "caring, individualized attention the firm provides its customers" (PBZ, 1988, p. 22). Total reliability for the scale approached .90 in the cases of the four tapped service firms. Convergent validity was assessed by comparing an overall measure of quality with SERVQUAL scores using a one-way ANOVA. The scale was found to have convergent validity.

An empirical examination of the Extended Service Quality Model (ESQM) may be found in PBZ (1990). PBZ developed a list of propositions to be tested empirically. The first four propositions hypothesized the relationship between the size of the gaps and their related theoretical constructs (e.g., the size of the marketing information gap is negatively related to marketing research orientation). The fifth proposition hypothesized a

relationship between customer expectations and perceptions and the size of the first four gaps. The final proposition hypothesized that the SERVQUAL instrument is a valid measure of customers' overall evaluations of service quality. Some of the propositions were supported while others were not.

The results regarding the fifth proposition were mixed. The first four gaps were found to be weakly associated with Gap 5 (service quality gap), and account for a negligible amount of the variation in Gap 5. None of the regression coefficients were statistically significant. These findings leave one to question whether service quality is not measured by a difference between expectations and perceptions of performance, or whether the constructs have not been adequately operationalized?

The results of the study done by PBZ (1990) led the authors to suggest the following future research scenarios: (1) refine the scale for the contributing factors, (2) conduct in-depth research on each gap, (3) investigate different levels of analysis, (4) look at differences among companies, (5) identify other variables, and (6) develop alternative measures of the difference score constructs.

PZB have themselves gone on to further research in the area of service quality. They have continued work in the development of the SERVQUAL instrument (PZB, 1991, 1994a, 1994b) and have studied the role and use of expectations and their link to behavioral intentions (Zeithaml, Berry, and Parasuraman, 1991,1996). That literature is presented in a later section of this chapter.

Swartz and Brown

In their 1989 article Swartz and Brown explored the evaluation process for professional services. Both providers and customers of a professional service (primary health care) were covered in their analyses. Health care customers were surveyed by means of a telephone interview. Health care providers (i.e., physicians) were surveyed by means of a mail questionnaire. The focus of the survey instruments was the perceptions of both customers and physicians toward health care and primary health care providers. Participants were presented with a series of statements regarding physicians, health care, and the public's view of each. They were asked to indicate their level of agreement or disagreement using a five-point scale.

Results indicated that for both customers and physicians, the assessment of quality is a function of both expectations and experiences. The authors used their results to construct a conceptual model for evaluating professional service quality. This model showed that a series of gaps were likely to occur when measuring service quality. Gap A was the difference between customer expectations and their actual experience. Gap B was the difference between customer expectations and physician perceptions of their patient's expectations. Gap C was the difference between customer experiences and provider perceptions of patient experience. Finally, Gap D was the difference between a physician's personal thoughts about the patient and what they perceive the patients' views to be.

Bolton and Drew

Bolton and Drew (1991) conducted a study in which they investigated how customers' evaluations of service quality were affected by changes in service offerings. They performed a field experiment in which customers were repeatedly surveyed while a significant service change was implemented. The study focused on temporal changes in individual attitudes (i.e., evaluations of service quality). The authors outlined a general model of attitude as follows. Attitude about a service depends on one's prior attitude. This is modified by perceptions of current performance, prior expectations of performance, and the difference between expectations and perceptions.

Results of the study, which involved telephone company customers, indicated that perceived improvement in telephone service had a positive effect on customer attitude. Also, customer perceptions of current performance seemed to have the biggest impact on satisfaction and attitude. As hypothesized, current attitudes were influenced by prior attitudes. Finally, the authors noted that individual ratings of the components of service quality were sensitive to the effects of a service change, but average ratings of service quality were stable and change slowly.

Cronin and Taylor

In their article, Cronin and Taylor (1992) suggested that the conceptualization and operationalization of service quality by the SERVQUAL instrument was not adequate. They contended that the marketing literature instead supports a simple performance based measure of service quality, customer expectations should not be included. Therefore, they

developed and tested the SERVPERF instrument. In addition, the authors examined the relationships between service quality, satisfaction, and purchase intentions.

Results of their research suggested that quality should be conceptualized and measured as an attitude. In addition they contended that the SERVPERF scale explains more of the variation in service quality than does SERVQUAL. They believed that this is true because SERVQUAL is based on a satisfaction rather than attitude paradigm and the SERVQUAL model is not confirmed for all industry types.

The seemingly contrariness (to PBZ) of this study points to need for additional study of the service quality and customer satisfaction constructs. In addition, even though the authors do not support the use of expectations in a measure of service quality, they do support expectations as an element of customer satisfaction.

Boulding

Boulding, Kalra, Staelin, and Zeithaml, (1993) developed a dynamic process of service quality. They propose a model of service quality that follows customers' formation and updating of perceptions of service quality. Also, the model delineates the effect of those perceptions on individual behavioral intention variables. The authors made two assumptions in the model: (1) a customer's current perceptions of service quality after receiving the service are a blend of their prior expectations of what "will", and what "should", happen and the actual delivered service; and (2) customers update their expectations whenever they receive information about the service firm. This implies that change and/or personally relevant experience may impact customer expectations. The

model was tested first in a laboratory study which involved multiple encounters within a hotel setting. The analyses of the first study suggest that (1) "will" and "should" expectations are different constructs; (2) "will" expectations positively affect and "should" expectations negatively affect customers' perceptions of service quality; and (3) there is a measurable effect of "will" and "should" expectations on behavioral intentions when the service is fixed. The second study involved a field study conducted in an educational institution. Results of the second study indicated once again a link between perceived quality and behavioral intentions.

Spreng and Mackoy

Spreng and Mackoy (1996) discussed the conceptual arguments separating service quality and customer satisfaction. Included in those arguments is the effect of customer expectations on measurements of service quality and customer satisfaction. This was accomplished by testing a model of service quality and satisfaction first developed by Oliver (1993). In this model Oliver suggested that service quality is a function of the comparison between ideals and perceptions of performance regarding quality dimensions. However, satisfaction is a function of the disconfirmation of predictive expectations surrounding both quality and non-quality dimensions. Also, perceived quality is an antecedent of satisfaction. Spreng and Mackoy contend that there are several limitations to the model. These include: (1) satisfaction is not related to disconfirmation of ideals, and (2) expectations do not influence perceptions of performance.

To test the model Spreng and Mackoy examined student assessment of an undergraduate advising office. Participants filled out a questionnaire prior to meeting with an advisor. This questionnaire asked about student's desires and expectations regarding ten attributes of advising. Students also completed a post-advising appointment instrument. Again all ten attributes were measured. The authors completed confirmatory factor analysis and structural equations modeling on the data collected by the surveys. Results indicated that service quality and satisfaction are two distinct constructs.

Summary of the Service Quality Literature

It is clear from this review that a real interest in service quality research exists. It is also clear that one thread appears in most of these models. That thread is customer expectations (PBZ, 1990; PZB, 1985, 1988; Swartz and Brown, 1989; Bolton and Drew, 1991; Boulding et al., 1993; Spreng and Mackoy, 1996) In fact, in a review of the literature pertaining to service quality, Iacobucci, Ostrom, Braig, and Bezjian-Avery (1996) found that most models of service quality contain an expectations component. Therefore, it appears that there is support for further study of the expectations construct. The next section of this chapter provides a review of the literature as it directly relates to the expectations construct.

Expectations

The expectations construct has a wide and varied past. It has been studied by many disciplines, including economics, behavioral decision theory, and marketing (Oliver and Winer, 1987). Because the theoretical framework that provoked the need for this study evolved within the marketing discipline, the initial focus of this review will be on expectations as studied within the marketing literature. This will be followed by a review of expectations as studied in the pharmacy literature.

Expectations and Marketing

In marketing, the expectations construct is described primarily in the satisfaction/dissatisfaction and service quality literature. This section will provide a general review of the construct as presented in those areas.

One of the earliest definitions of expectation may be found in the work of Georgescu-Roegen (1958), who defined expectations as "the state of mind of a given individual with respect to an assertion, a coming event, or any other matter on which absolute knowledge does not necessarily exist" (p. 12). He suggested that expectation and motive are two distinct constructs.

An exploration of the expectations construct continued with the work of Olson and Dover (1979). These authors criticized past work in disconfirmation of customer expectations. They suggested that the expectations construct had not been clearly tested or conceptualized. Therefore they presented a definition of expectations as pretrial beliefs

about a product. This allowed disconfirmation research to focus on: (1) the processes by which belief expectations were created; (2) the effects that product trial experience have on belief structures; and (3) the effects of pre and post trial beliefs on attitudes, intentions, and behavior. Their study was designed to demonstrate the usefulness of conceptualizing expectations as beliefs, and provide a stimulus for future research.

In their study Olson and Dover (1979) first exposed the subjects in the experimental group to three ad-like communications from a coffee manufacturer. The subjects were then asked to complete and return a written survey. In the fourth and final exposure all subjects (control and experimental) participated in a taste test. The authors were successful in creating a pretrial belief, in the experimental group, that the coffee was not bitter. Results of the taste test showed that the experimental group was significantly different than the control group in assessing the bitterness of the coffee. The control group found the coffee to be more bitter than the experimental group both before and after the experimental manipulation.

In his 1980 article, Oliver presented the case for the inclusion of the expectations construct in the study of customer satisfaction. He argued that data from studies of that time showed significant expectations effects when expectations were manipulated or measured prior to product exposure. He also provided a study of the relationships among expectations, disconfirmation, satisfaction, attitude, and purchase intention. In the study expectations were measured as "the perceived belief probabilities attributed to eight consequences of receiving the flu shot" (Oliver, 1980, p. 462). Results seemed to support that post-usage ratings of satisfaction were a function of expectations and disconfirmation.

Woodruff, Cadotte, and Jenkins (1983) provided readers with an alternative model to the confirmation/disconfirmation model of satisfaction. In their conceptual model expectations are replaced with experience-based norms. These experience based norms are the standard of comparison for a brand's performance. They base this "replacement" on the argument that to date expectation based disconfirmation measures had modest correlations with measurements of satisfaction. Also, they suggested that if one applied social equity theory, the basis for comparisons of a brand's performance became the degree of equity between the customer and their peers. Finally, they suggested that brand comparison levels be based on the perceived capabilities of several brands in a brand category. Therefore, satisfaction may be based on both standards and expectations.

In 1991, Zeithaml, Berry, and Parasuraman (ZBP) examined the nature and determinants of customer expectations of service. The authors found that there is agreement, in the literature, that expectations serve as standards for future experiences. However, questions remain on other issues. For example, what is the specific nature of the expectation standard? Also, how many standards are used? Finally, what are the sources or antecedents of theses standards?

In order to answer the above questions, ZBP conducted focus group interviews with customers. This exploratory research laid the groundwork for a conceptual model of customer expectations of service. Sixteen focus group interviews were held. These group interviews were divided into different segments as follows: (1) business customer and pure service; (2) business customer and product related service; (3) end customer and pure service; and (4) end customer and product related service. Four focus group interviews

were held with customers from each group. Two interviews were with experienced customers and two with inexperienced customers. The interviews were held in five cities, Atlanta, Chicago, Seattle, Rochester, and Dallas. Interviews were conducted by field research companies in those cities. The interviews were unstructured in manner and included broad open ended questions.

The analyses of the focus groups results involved a three step process. First, the researchers conducting the groups met at the end of each interview to informally discuss their impressions of the interview and to identify any emerging themes. Second, themes identified by the first focus groups were also informally identified in later interviews. Finally, a formal content and interpretive analysis of written transcripts was conducted after all focus groups were completed. With these results the authors constructed a generic model of customer expectations of service, which serves as an addition to the Extended Service Quality Model. ZBP's generic model of customer expectations may be divided into four sections, the expected service component, antecedents of desired service, antecedents of both predicted and desired service, and antecedents of adequate service. Each of these is described below.

The expected service component is comprised of three parts, expectations for desired levels of service, expectations for adequate levels of service, and a zone of tolerance between the two. Expectations for desired levels of service may be defined as the level of service that the customer hopes to receive. This is a blend of what the customer believes can and should be. Expectations for an adequate level of desired service may defined as the level of service the customer will accept. ZBP (1991)

hypothesized that a customer's expectations for an adequate level of service would be more variable than their expectations for desired levels of service. They based this hypothesis on the assumption that desires come from an accumulation of experiences, while adequate levels are a function of competition among other variables.

The zone of tolerance is the difference between a customer's expectations for a desired level of service and their expectations for an adequate level of service. The authors found (from the focus group interviews) that changes in the zone of tolerance are more a function of expectations for adequate levels of service. Also, the zone of tolerance may vary for the five dimensions of service quality: reliability, responsiveness, assurance, empathy, and tangibles.

Expectations for desired levels of service are defined as the level of service that the customer hopes to receive. Focus group interviews provided six antecedents for desired levels of service. The first, enduring service intensifiers may be defined as "individual stable factors that lead the customer to a heightened sensitivity to service" (ZBP, 1991, p. 15). One type of enduring service intensifier is derived service expectations. In this instance a customer's expectations are driven by another party. Another enduring service intensifier is a personal service philosophy. This is a customer's underlying attitude about the meaning of service. The second antecedent is personal needs. Personal needs are "the states or conditions essential to the physical or psychological well being of the customer" (ZBP, 1991, p.15).

Four of the antecedents of desired service were found to impact predicted service. Explicit service promises are statements which the service provider makes to its

customers. Implicit service promises are simply cues, which the service provider makes, which lead to an inference about what the service encounter will be like. Word of mouth communications were another antecedent of desired and predicted levels of service. Past experience with the service is the final antecedent of desired and predicted levels of service.

ZBP (1991) found that customer's expectations for adequate levels of service have five antecedents. Those antecedents include transitory service intensifiers, perceived service alternatives, customer self-perceived service roles, situational factors, and predicted service. The first antecedent, transitory service intensifiers may be defined as "temporary individual factors that lead the customer to a heightened sensitivity to service" (p. 16). Perceived service alternatives are simply the customer's perceptions of the availability of a comparable service. That is, what is the competition? The third antecedent, customer self-perceived service role relates to the customer's involvement with the service. It is the degree to which the customer perceives they influence the service. At times a service provider cannot control the situation in which the service is provided. The customer believes that these situational factors, the fourth antecedent, are not the service provider's fault and they may accept a lower level of adequate service. Predicted service is the level of service that customers believe they are likely to receive. It is important to note that this definition of predicted service is synonymous with the definition of expectations found in the satisfaction/dissatisfaction literature.

The development of these various levels of expectations for service led ZBP (1991) to revise the gap model first presented in PZB (1985). The fifth gap was revised to

include two components: (1) the perceived service superiority gap; and (2) the perceived service adequacy gap. The perceived service superiority gap is the difference between desired and perceived levels of service. The perceived service adequacy gap is the difference between adequate and perceived service.

PZB continued their research in the area of service quality with their 1994 Marketing Science Institute report. In this report the authors examined three issues: (1) incorporation of adequate and desired expectations of service into the SERVQUAL instrument; (2) assessment of alternative service quality measurement approaches; and (3) examination of the relationship between customers' behavioral intentions toward service providers and service quality. Of these three issues, the first two are relevant to this literature review. The final issue is beyond the scope of the planned research study.

In order to test the incorporation of adequate and desired levels of service into the SERVQUAL instrument, PZB developed and tested three versions of a questionnaire. In the first, a three column format, separate ratings of desired, adequate, and predicted service were obtained from three identical side by side scales. In the second, a two column format, direct ratings of the service adequacy and service superiority gap were obtained from two identical side by side scales. The third version was a one column format. With the one column format direct measures of the service adequacy and service superiority gap were also obtained. However in this version the measures followed one another, similar to the original SERVQUAL instrument. The twenty-two attributes found in PZB's 1991 version of the SERVQUAL instrument could be found in all three versions. In addition to the section described above, each questionnaire contained two questions to

assess respondent ease and confidence in their answering the questions. Also, questions were included that measured perceptions of overall service quality and value, relative importance of the SERVQUAL dimensions, behavioral intentions, and demographics.

The surveys were mailed to customers of a computer manufacturer, a retail chain, an auto insurer, and a life insurer. The sample for each company was randomly divided to receive one of the three versions of the instrument. The overall response rate was 25%. All three versions of the instrument exhibited high reliability, and showed evidence of good predictive, convergent, and discriminant validity. The third version of the scale (i.e., one-column format) showed the most predictive power. This was followed by the two then three column version of the instrument. Predictive validity was measured by the percentage of variation accounted for in the single item overall measure of service quality.

Thus far this review has provide a description of the expectations construct as explained in the marketing literature. The next section will review the construct as presented in the pharmacy literature.

Expectations and Pharmacy

The study of expectations is not new to pharmacy research. However the study of expectations has not traditionally been framed as in the marketing literature. That is, the pharmacy research seems to be atheoretical in nature. Outlined below is an historical overview of the construct as it relates to the practice of pharmacy.

Knapp, Knapp, and Edwards (1969) undertook a study to examine the occupational role perceptions of the pharmacist. The authors suggested that if the

pharmacist was to take on a professional role in health care, current role expectations would need to be modified. In their study the authors developed two scales to measure the perceived occupational roles of pharmacists. Study participants included pharmacists, physicians, and the general public.

The first scale contained statements describing possible characteristics of a pharmacist. Study participants responded to this scale by first circling the one item which they least wanted the ideal pharmacist to say or do. Next the participants were asked to circle the item which corresponded to their ideal pharmacist. This continued until the respondent circled no further items. Next, using the identical nineteen item scale, participants were asked to circle the one statement most like the pharmacist of today and the one statement least like the pharmacist of today. The procedure was modified for pharmacist participants. This group was asked to predict how the other groups viewed the pharmacist. The second scale was a semantic differential scale with nineteen pairs of bipolar adjectives. All participants were asked to rate the occupational concepts of physician, pharmacist, technician, and professional on each of the seven point bipolar scales.

Results from the first scale showed that for all subjects there was agreement as to the most preferred and least preferred pharmacist characteristics. Also, there were no statistically significant differences among any of the groups for latitudes of acceptance and non commitment in the description of the ideal pharmacist. However, physicians and the general public of a lower socio-economic status (SES) were statistically different than the remaining groups in their latitudes of rejection. That is, physicians and the general public

of the lower SES group had higher standards for pharmacists than did pharmacists themselves. When perceptions of the ideal were compared to perceptions of the actual pharmacist, pharmacists were found to not be doing those activities considered most acceptable. Results from pharmacist participants showed that they rated the public as being less particular than they actually were. The semantic differential scale showed that physicians were rated most favorably. This was followed by professional, pharmacist and then technician.

In a 1973 study conducted by the Dichter Institute for the American Pharmaceutical Association (APhA), participants indicated that pharmacists were first a business person with primarily commercial motivations. Also, in their study the Dichter Institute found that the public was not aware of the services that pharmacists could provide.

In their study, Norwood, Seibert, and Gagnon (1976) examined the attitudes of rural customers and physicians toward expanded occupational roles for pharmacists. They suggested that because drugstores were more evenly distributed (i.e., accessible) than physicians, dentists, or hospitals, the pharmacist may be an ideal candidate for an expanded role. In order to assess the acceptance of a broader role for pharmacists, physicians in a nine county area of northeast Iowa as well as customers of a participating pharmacist were asked to complete a questionnaire. The questionnaire contained "should" statements describing roles that pharmacists might take. The physician group provided a 33% response rate while the customer group provided a 28% response rate.

In regards to statements about pharmacist consultations for drugs, poisons, and sickroom supplies, both customers and physicians viewed all pharmacist roles favorably. Both customers and physicians indicated that pharmacists should use a patient's records to detect drug-drug interactions and should advise patients on prescription and non-prescription medications. Of interest were the roles that customers indicated they would pay for. Customers (27.6%) indicated that they would be willing to pay for the availability of surgical and sick room supplies. Also, customers (14%) indicated that they would be willing to pay for information regarding emergent treatment of poisonings.

Patients and physicians differed in their rankings of the pharmacist's role in preliminary diagnosis, screening, and treatment. Customers viewed these roles more favorably but were not strongly in favor of the pharmacist acting in these roles. Physicians viewed any role of the pharmacist as a general health information source negatively. Customers were neutral for this category. Finally, neither physician nor customers positively viewed pharmacists in the role of drug selection, dosing, or administration.

DeSimone, Peterson, and Carlstedt (1977) gathered data regarding the interactions between pharmacists and their patients. The authors believed that patient initiated interactions with his or her pharmacist showed a level of need as well as an expectation that the pharmacist could fulfill that need. Sixteen pharmacists participated in the study which gathered the following information: (1) patient age, (2) patient gender, (3) whether the patient came to or called the pharmacy, (4) whether the question concerned a prescription or non-prescription drug, and (5) the question category.

Results showed that patients most often asked for a recommendation for a non-prescription product. The second most often asked question regarded the indications of a particular drug product. Third, patients asked questions about their prescription refills. In terms of the demographic information gathered, results showed that women asked almost twice as many questions as men. In terms of age, respondents in the twenty to twenty-nine year old category had the most frequent contact with their pharmacist, while those in the over sixty age category were next to last in terms of frequency. Most questions were asked in person, and more questions were asked about prescription than nonprescription medications.

In their study Ludy, Gagnon, and Caiola (1977) wished to determine if patient's satisfaction with pharmacy services could be increased and drug misuse decreased if the patient received more individualized care. Seventy-five patients were randomly assigned to either a satellite or traditional pharmacy. These patients completed two questionnaires. The first consisted of attitudinal questions about the patient's satisfaction with services in general and the interaction with the pharmacist. In addition, the patient was asked to indicate which of a list of nineteen activities they expected the pharmacist to do and whether the pharmacist performed the activity with each prescription. At a later date sixty-eight of the original patients completed a second questionnaire in their home or at the hospital. This questionnaire contained three attitudinal questions regarding the patient's satisfaction with the drug therapy. Also included were open-ended questions regarding the patient's recall about information provided about the drug therapy.

A chi-square analysis of the results showed that there was a statistically significant difference in expectations regarding most activities between those assigned to the satellite and those assigned to the traditional pharmacy. Also, patients were significantly more satisfied with the satellite pharmacy. Finally, waiting time, satisfaction with hospital service in general, time spent with the pharmacist, and the total number of activities performed by the pharmacist during an interaction were all significantly correlated with satisfaction.

In order to better understand demand for comprehensive pharmaceutical services, Banahan, Sharpe, and Smith (1980) studied customer expectations and use of those services in a rural area. Trained personnel interviewed a responsible adult in 603 households in a three county area of Mississippi. The interview questions covered a wide range of health care topics, including: demographic characteristics; use of and attitude toward pharmacy services; current health status and behavior; and general satisfaction with current medical services, among others.

Results showed that patients most often expected services related to medications and medication use (e.g., 65.9% expected counseling on side effects). While most of the results were reported as frequencies, the authors did note some differences among groups. For example, respondents that either strongly or somewhat strongly agreed that pharmacists should counsel on side effects were more likely ($p<0.01$) to report that the pharmacist did explain side effects. Also, respondents who expected their pharmacist to provide health information (other than on drugs) were more likely ($p<0.01$) to report asking those questions.

Mackowiak and Manasse (1984) completed a study comparing the expectations for ambulatory services in both office based and traditional pharmacies. The study site was a small Midwestern town in which both pharmacy types existed. The study used a posttest only and measured differences in expectations and satisfaction between the two practice types. The study questionnaire was designed to measure patient expectations of, and satisfaction with, sixteen pharmacy services. To measure expectations the items were labeled: "I expect the pharmacist", and the satisfaction items were labeled "Level of satisfaction with the way your pharmacist provides this service is". Researchers attained a 62% response rate. The mean expectation score for all respondents and all services was 3.98, and the average satisfaction score was 3.74. Of the sixteen activities, office practice customers reported significantly higher expectations scores for ten of the activities. Satisfaction scores were also significantly higher in nine of the sixteen activities. In addition to practice type differences, the authors found that frequency of pharmacist contact was significantly related to higher expectation and satisfaction scores.

In their study, Sirdeshmukh, Pathak, Kucukarslan, Segal, Kier, and Aversa (1991) presented the results of an exploratory analysis of patient satisfaction/dissatisfaction and post exchange actions in the high blood pressure prescription market. The study examined the relationship of patient satisfaction with providers of treatment (e.g., pharmacists) and the drug product to the following variables: expectations and performance, perceptions of equity, overall perceived satisfaction, and responses to dissatisfaction.

Four focus groups with an average of ten customers each were conducted in Florida and Ohio. Participants were elderly high blood pressure patients. The interview

was originally conducted using a matrix approach with a horizontal investigation of all variables with respect to each exchange partner. That is, participants were first asked questions about the physician followed by the pharmacist, manufacturer, and then the drug product. However, the format was changed when researchers found that participants tended to speak about their experiences and feelings based on the variable rather than the exchange partner. Therefore, the last three focus groups followed a vertical investigation of each variable across exchange partners. Written transcripts of each focus group were content analyzed to identify the key themes associated with each variable. With regard to the first variable, expectations and performance, the analysis showed that patients judged their providers in terms of performance without an explicit use of expectations. The authors suggested that this was a result of the patients' high involvement state. However, patients did rely on expectations in the judgement of the drug product's side effects. Therefore the authors concluded that patients have two sets of standards, one for persons (e.g., pharmacists) and the other for tangibles (e.g., drug product).

In order to gain a better understanding of customer expectations toward pharmacist provided drug information (PPDI), Wiederholt and Rosowski (1996) examined pharmacy customers in three community pharmacies. The study was based on the following questions: (1) do customers have expectations of PPDI as a service? (2) what antecedents are associated with the formation of those expectations? and (3) are patient's age, gender, and/or delivery site related to the expectations of service? The authors based their work on the model created by ZBP (1991). However, because the authors chose the customer satisfaction/dissatisfaction paradigm as an underlying theme, they chose

predictive expectations as defined in the model to be their dependent variable. The independent variables included past experience with PPDI, implicit services associated with PPDI, word of mouth communications associated with PPDI, and explicit service promises associated with PPDI. Each of these are suggested antecedents found in ZBP (1991).

A multi-attribute measure of expectations toward PPDI was developed by examining existing literature, and the recommendations for patient counseling made by the National Association of Boards of Pharmacy, the Wisconsin Board of Pharmacy, the American Society of Health System Pharmacists, and OBRA 1990. This resulted in a list of thirteen attributes that were measured with a five point scale labeled definitely do not expect to definitely expect.

A factor analysis of the multi attribute expectation scale revealed that all items loaded onto one factor which explained 56.4% of the variance. Cronbach's alpha for the scale was 0.97. Also, the four antecedents of customer expectations became six factors, intra personal sources, extra personal sources, past experience 1 (recency, frequency, times), past experience 2 (duration, completeness), implicit service promises, and explicit service promises. When examining the effects of the antecedent variables on customer expectations, the authors found that explicit service promises and word of mouth communication were the only two variables with a significant association. Association between the other variables (age, gender, and site) and expectations varied from pharmacy to pharmacy.

Ranelli and Coward (1997) examined the relationship between place of residence of elderly patients and their expectations about communication with pharmacists. Interviews were completed with 200 respondents from each of two (urban and rural) residence groups. Interviews were completed using a forty-six item scale. The scale was comprised of mostly closed end and forced choice items.

The authors hypothesized that three clusters of independent variables (personal characteristics, self-reported health measure, and experience with prescription drugs) would affect the expectations of the respondents. The dependent variable was older adult expectations about communication with a pharmacist.

Results showed that the rural sample, in general, held higher expectations for pharmacists. Of the nine items in the expectation scale, there were significant differences on six of the items. Also, the rural elders had higher means on all nine items. However, there was no significant difference between rural and urban adults in the relative rankings of the nine items. The multivariate analysis of the independent variables showed that place of residence was a significant predictor of expectations in three of the four models specified. Only in the fourth fully specified model did place of residence become insignificant.

Summary of Literature Review

Marketing literature is replete with research involving the expectations construct. However, most of the early research involved the customer satisfaction/dissatisfaction

domain (Olson and Dover, 1979; Oliver, 1980; Woodruff, Cadotte, and Jenkins, 1983). PZB (1985, 1988) and PBZ (1990) were the first marketing researchers to begin a thorough examination of the expectations construct in terms of the service quality domain. While they have continued to work in this area, they have not continued to develop the expectations construct. That is, they have made propositions about the construct (ZBP, 1991; PZB, 1994b) but have not continued to examine the construct.

Pharmacy literature also shows an interest in the expectations construct. Expectations of pharmacist roles were examined by Knapp, Knapp and Edwards (1969) as well as Norwood, Seibert, and Gagnon (1976). DeSimone, Peterson, and Carlstedt (1977) studied patient initiated contact with their pharmacists. Patient initiated contact was considered an expectation that the pharmacist could respond to the contact. The relationship of expectations with customer satisfaction/dissatisfaction is also a focus of study (Ludy, Gagnon, and Caiola, 1977; Sirdeshmukh, et al., 1991; Wiederholt and Rosowski, 1996). However, none of these studies defined expectations in terms of a service quality framework. In fact, few of the pharmacy studies provide any conceptual definition of, or theoretical framework for, the construct and often show conflicting results. Therefore, this study is proposed to fill that gap. That is, the purpose of this study is to develop a substantive theory of customer expectations of community pharmacy services.

Using the grounded theory approach pharmacy customers were interviewed and observed in an effort to understand their expectations for community pharmacy service. That approach is described in the following chapter.

CHAPTER 3
METHODS

The purpose of this research was to build a substantive theory of customer expectations of community pharmacy services. In order to accomplish this goal, the grounded theory method was used. That method and the specifics relating to this research are described below.

Research Design

The grounded theory method was developed by sociologists Barney Glaser and Anselm Strauss in 1967, as a way of systematically generating theory from data. Grounded theory enables the researcher to understand just how individuals interact with, and subsequently view, their world. This method is useful in studies where little is known about a particular subject or where much is known but clarification is needed (Hutchinson, 1993).

In grounded theory, data are collected (e.g., through interviews), coded (i.e., taken apart), and analyzed (i.e., put back together) in a continuous process. As data are compared, concepts emerge and categories are formed. Continued study reveals relationships among the categories along with higher conceptual levels of categories.

Hypotheses about the data are generated and a core variable of a theory emerges (Glaser and Strauss, 1967). A grounded theory is complete when the properties, conditions, strategies, and consequences of that variable are explicated and integrated.

As was indicated in the previous chapter of this work, the expectations construct has been studied from many viewpoints, however, researchers have not yet reached a common understanding of the construct. Therefore, grounded theory provides a method for examining the expectations construct directly from the data. The result of this study, a substantive theory of customer expectations of community pharmacy services, provides a clear common starting point for future expectations research.

Sample

Choosing a sample for qualitative interviews does not always follow the same rules (e.g., random sampling) as choosing a sample of participants to complete a quantitative survey. In qualitative research sampling is often purposeful. That is, the sample of events, settings, or persons is chosen to provide information that is not readily available from other choices (Maxwell, 1996). Using a random sampling technique to draw a small sample may introduce chance variation.

Purposeful sampling has four possible goals. The first is to achieve representativeness in the chosen sample. That is, the sample will be systematically chosen for typicality and relative homogeneity. This may provide confidence that any conclusions actually represent the members of the population from which the sample was drawn. A

second goal of purposeful sampling is to specifically examine cases that are critical for the theoretical framework underpinning the study. A third goal is to pick a sample that will enable the researcher to make comparisons of the reasons for differences between those sampled. A fourth goal of purposeful sampling is to sufficiently capture the population's heterogeneity, with the aim of representing the range of variation within that population (Maxwell, 1996). The initial sample for this study was purposively chosen from community pharmacy customers with a range of pharmacy experiences.

In order to assess the range of pharmacy customers to be sampled, the pharmacy expectations literature was examined. Past studies of pharmacy customer expectations examined customer's gender (DeSimone, Peterson, and Carlstedt, 1977; Kucukarslan, 1998), race (Kucukarslan, 1998), and age (DeSimone, Peterson, and Carlstedt, 1977; Mackowiak and Manasse, 1988; Norwood, Seibert, and Gagnon, 1976). Kucukarslan (1998) included an assessment of education level in her study of expectations. Kucukarslan (1998) and Ranelli and Coward (1997) examined whether customers had acute or chronic illnesses, and the average number of prescriptions purchased. Also included in past studies of customer expectations were type of pharmacy patronized (Ludy, Gagnon, and Caiola, 1977; Mackowiak and Manasse, 1984; Kucukarslan, 1998) and frequency of pharmacy contact (DeSimone, Peterson, and Carlstedt, 1977; Mackowiak and Manasse, 1984). Each person interviewed was asked about these characteristics and an effort was made to represent the range in variation of the characteristics.

Sample Recruitment

The first seven participants in this study were recruited by contacting individuals suggested by friends and asking for their participation. Only current or past customers of community pharmacies were asked to participate. All seven persons contacted agreed to participate.

Recruiting later in the research process began in two independently owned community pharmacies in Jacksonville, Florida. I visited the two pharmacies on separate occasions and spoke with various customers about the research project while they were waiting for their prescriptions. The pharmacists and staff at both stores had been briefed about the project and at times they introduced a possible volunteer to this researcher. However, none of the pharmacy customers that were approached volunteered. Therefore, I devised another recruiting technique.

The revised technique involved two changes. The first was to add a fifteen dollar gift certificate to a local restaurant as a token of regard and appreciation for the participant's time. In addition, a small bag clipper was developed. This bag clipper listed the researcher's name and phone number, a brief description of the participant's involvement, three ways to volunteer for the interviews, and a mention of the gift certificate. Staff at both pharmacies were asked to attach one pink bag clipper to each pharmacy bag. The bag clippers were put into use for a two week period, resulting in a total of twenty-three volunteers. Fifteen of those volunteers completed interviews, and the remaining eight are available for future interviews.

In addition to the bag clippers, friends and interviewees were tapped for possible volunteers. Eight additional individuals volunteered for interviews. Five have completed interviews, and the remaining three are available for future interviews.

Sample Description

Twenty-seven individuals participated in interviews during the course of this research. Twenty-one (78%) of the participants were female, and six (22%) were male. In regard to age, eight (30%) were under the age of forty. Nine (33%) of the interviewees were between the ages of forty and fifty-nine, and ten (37%) were age sixty and above. Ages ranged from twenty-eight to eighty-seven years. The majority, twenty-four of twenty-seven (89%) of the participants were white. Two (7%) were African American and one (4%) was Hispanic. The sample group included two (7%) individuals who had a high school diploma, and seventeen (63%) individuals who had some college experience. Eight (30%) of the participants had at least a four year college degree.

There was an attempt to interview pharmacy customers who would have a range of pharmacy related experience. To that end, three (11%) of the interviewees paid for their medications themselves. Twenty (74%) of the interviewees shared payment with another source (e.g., insurance), and three (11%) of the interviewees depended on an outside source to completely cover the cost of their medication. One (4%) individual shared payment responsibility on some medications, and on others another source (i.e., the military) paid the bill. With regard to the type of pharmacy patronized, five (19%) strictly shopped at chain pharmacies. Sixteen (59%) of the participants shopped at independent

pharmacies, and one (4%) patronized a clinic pharmacy. Four (15%) of the participants patronized both chain and independent stores, while one (4%) patronized both a chain and military pharmacy. Of those asked (n=18), twelve (67%) participants visited their pharmacy at least every two weeks. Two (11%) visited monthly, three (17%) quarterly, and one (6%) visited yearly. Participants estimated that their average medication use ranged from one-half to twenty-five prescriptions per month. Most (twenty-three or 85%) indicated that they had some sort of chronic medical condition. Finally, of those asked (n=18), six (33%) rated their health status as fair, six (33%) as good, and four (22%) as excellent. One (9%) participant rated her health as poor to fair, and one (9%) as fair to good.

Theoretical Sampling

Theoretical sampling is defined as "the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges" (Glaser and Strauss, 1967, p. 45). Theoretical sampling allows the researcher to sample not with a preconceived notion, but with real, specific guidance from what is occurring in the research setting (Glaser, 1978). In this study, theoretical sampling was employed after the interview participants were chosen. Theoretical sampling of the interview transcripts and field notes allowed me to pursue and expand the codes emerging from the data. This in turn led to the discovery of the basic social problem and process which form the core for the developing theory.

Data Collection and Recording

Data for this research were collected through a series of semi-structured interviews and observations. Interviews were conducted at a time and place designated by the interviewee, and lasted from forty-five minutes to an hour and a half. Each interview was tape recorded and subsequently transcribed into the Word Perfect computer software.

Customer - pharmacist interactions were observed on five separate occasions, with observation times ranging from two and one-fourth hours to six hours. I sat or stood in an inconspicuous place in each of the four pharmacies. Twenty-three pages of field notes describing the pharmacy environment as well the customer - pharmacist interactions were recorded. Observations took place in two independent pharmacies, one chain pharmacy, and one grocery store pharmacy.

In addition to the customer interviews described above, four community pharmacists were asked to record their thoughts regarding the process that they used in problem assessment. One pharmacist provided his notes to me. Another pharmacist was interviewed via the telephone and I reduced the conversation to writing.

Interview Guide

An initial interview guide for this study was developed using a four step process. First, a review of the literature was undertaken. Next, with the aide of the research objective, the literature, and suggestions from Patton (1980), I developed nine, multi-part expectations interview questions. Then, faculty members in the College of Pharmacy

reviewed and suggested improvements in the questions. Finally, a practice interview was completed with the aid of a University of Florida Anthropology graduate student. A discussion of possible interview improvements followed the close of the practice interview. Revisions were made, resulting in the final interview guide. The final form of the interview guide includes introductory remarks, nine, multi-part, open-ended questions and four biographical questions. Throughout the interviews, probes were used as necessary to clarify points and/or to further tap any emerging ideas. The final form of the initial interview guide may be found in Appendix A.

After seven interviews were conducted the interview guide was revised in an effort to expand the range of responses from the interview participants. Transcripts from the first seven interviews and continued exploration of the grounded theory methods literature served as a guide to the expansion of the questions. A group of sixteen questions formed the basis for the revised interview guide. After development, two faculty members from the College of Pharmacy reviewed the questions as an additional check. No revisions were made after faculty review. The final form of the revised interview guide may be found in Appendix B.

In addition to the questions specifically relating to the area of interest, interviewees were asked a series of questions (Appendix C) focusing on both demographic and pharmacy experience variables. The responses to these questions were used to describe and to assess the breadth of the sample.

Data Analysis

In grounded theory, data are analyzed in a detailed systematic manner. All interviews were tape recorded, transcribed, and entered into the computer software program WordPerfect. In addition, the complete transcripts of the first seven interviews were then entered into the software program Atlas.ti for Windows 95 version 4.1. This software program aids in the organization, and coding of qualitative data. After data entry, each sentence of the interview transcripts was examined and coded. Comparisons were made among the codes, sentences, and interviews. Categories emerged and a theory was developed. Throughout the process the focus was on organizing the ideas that emerged from the data, not the data itself (Glaser, 1978). Doing grounded theory requires the researcher to multitask as there are several steps in the research process that take place simultaneously. While those steps are described separately below, they were used as required by the method to uncover the basic social process described in the data.

Constant Comparison

Constant comparison is a foundation on which grounded theory rests. Data are not analyzed in a linear fashion, but are instead revisited throughout the research process. In other words, the grounded theorist is on constant watch for patterns in the data by comparing incident with incident, incident with category, and finally category with category (Hutchinson, 1993). In this study, comparisons began with specific responses found within the transcribed interviews (i.e., incidents). Those comparisons lead to the

development of codes and categories that were subsequently compared to each other as well as other incidents. Constantly comparing the data in this fashion revealed the conditions, causes, and consequences of the revealed basic social process. That is, constantly comparing the incidents and categories enabled the researcher to see the conceptual connections and test their fit as an integrated substantive theory.

Coding

According to Glaser, "the essential relationship between data and theory is a conceptual code" (1978, p. 55). A theory is generated when the hypothetical relationships between codes are developed. Coding allows the researcher to fracture the data and then conceptually piece it back together to form the theory. Two types of coding occur during analysis. Substantive coding allows the analyst to conceptualize the empirical content of the research. Theoretical coding conceptualizes the fit of the substantive codes into the integrated theory (Glaser, 1978). While both types of coding occur throughout the research process, substantive coding occurs most frequently in the initial stages and theoretical coding in later stages.

Initial substantive coding in this study was accomplished by reading each line of the transcripts of the first seven interviews and attaching codes to important words, phrases, and/or paragraphs. During this phase of coding I purposely coded without a preconceived list of ideas, an open coding procedure, resulting in a list of 162 codes. Subsequent to this, the complete list of codes was examined to determine whether some codes might be grouped together to form higher conceptual groups or categories.

Substantive coding continued with the next set of twenty interviews. However, at this point the coding focused on the use of the forty-four higher level codes developed from the first seven interviews. In addition to the use of the higher level codes, coding began to focus on the questions that Glaser (1978) suggests one ask: "What is this data a study of, what category does this incident indicate, and what is actually happening in the data" (p.57). It was at this point in the process that the basic social process emerged.

Once the basic social process emerged theoretical coding began. Data were examined to determine the conditions, causes, and consequences of the basic social process. This level of coding allowed the theory to become fully formed and integrated.

Memoing and Sorting

"Memos are the theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding" (Glaser, 1978, p.83). Writing memos is at the core of doing grounded theory. Memoing allows the researcher to "to theoretically develop ideas with complete freedom into a memo fund that is highly sortable" (Glaser, 1978, p. 83). Through memoing the analyst is able to raise data to a conceptual level, develop the properties of each category, develop hypotheses about relationships between categories and their properties, begin the integration of ideas, and place the emerging theory among other theories of more or less relevance (Glaser, 1978). In this study, memoing began with notes describing the settings of the initial interviews, and the demeanor of the participants during the interviews. Also, memos were written as ideas emerged about new codes, the basic social process, and connections between categories.

Sorting begins when codes and memos are plentiful, and the basic social process has been identified. Through sorting the analyst is able to discern the relationship of the different levels of codes to the basic social process. From this sort an outline of the theory emerges and write-up begins (Hutchinson, 1993).

Core Category

The result of the steps described above and central to grounded theory is the discovery of a core category or the basic social process within the data. The goal is to generate a theory, centered on this category, which will account for a pattern of behavior which is both relevant and problematic for the group under study. In other words, the basic social problem of the group under study is addressed by the basic social process. The basic social process should account for most of the variation in the pattern of behavior found within the data. Also, most of the other categories and their properties will relate to the core category. Because of these relationships, the core category serves as the integrating point for the theory (Glaser, 1978). The basic social process discovered in this study, Pharmacist Interceding, is discussed in complete detail later in this work.

Scientific Rigor

Internal validity, external validity, reliability, and objectivity, are the criteria by which the rigor of a quantitative study is judged. Lincoln and Guba (1985) suggest, however, that because the nature of qualitative inquiry is different, a separate set of

criteria be used to judge the rigor of naturalistic (i.e., qualitative) inquiry. Their criteria includes assessments of credibility, transferability, dependability, and confirmability.

Credibility, the qualitative researcher's equivalent to internal validity, is demonstrated when the researcher has shown that the findings and interpretation of those findings has "truth value" (Lincoln and Guba, 1985, p. 296) to those being studied. In this study, credibility was enhanced by the use of theoretical sampling, and concurrent data collection and analysis. Also, discussing the findings with colleagues and study participants provided a check on the truthfulness of the results.

Lincoln and Guba (1985) suggest that the qualitative researcher cannot comment on the external validity of a study. Instead, the naturalist provides a thick description that will enable other interested researchers to make judgements about the transferability of the findings from one context to another. In this study, descriptions were written to provide the widest possible range of information. For example, the case studies presented in Chapter Six describe both the process of interceding as it occurs for the customer and the customer's relevant demographic and pharmacy experience information. This information will enable other researchers to judge how similar the current research context is to their proposed research context.

Dependability and confirmability address the issues of reliability and objectivity. A determination of dependability and confirmability may be made through an audit process in which another investigator examines both the process and product of the inquiry (Lincoln and Guba, 1985). In this study, every effort was made to provide clear, understandable, and confirmable explanations of each step in the research process.

While the above criteria relate to qualitative inquiry as a whole, Glaser (1978) provides some specific guidelines for the evaluation of grounded theory studies. According to Glaser, "grounded theories have grab and they are interesting" (1978, p. 4). The theory must fit the area under study. Data are neither forced to fit pre-conceived categories, nor are they discarded just to keep a theory in place. The constant comparative method requires that data be compared and contrasted constantly, allowing an ongoing check on validity. A quality theory will explain the major behavioral and interactional variations in the area under study. The grounded theory must be relevant to the core variable that explains the social processes in the substantive area. That is, the individuals who are the actors in a particular setting should recognize the theory as being an accurate picture of the action. A good grounded theory is dense. There are a few theoretical constructs that are supported by a network of properties and categories, that are integrated to form a tight theoretical framework (Hutchinson, 1993). Finally, a grounded theory must be modifiable. While the basic social process remains stable, its variation and relevance may change quickly in the social world. Through coding and the constant comparative method, the grounded theory can be refined to account for new data found in further research (Glaser, 1978).

CHAPTER 4
FINDINGS: A MODEL OF PHARMACIST INTERCEDING

Customers of community pharmacy participate in a medication use system that is often confusing and hard to negotiate. They walk into the door of their community pharmacy with a piece of paper (i.e., prescription) in their hands, having been given a range of details about the drug(s) they are about to take. The prescription is dispensed, there is some interaction with the pharmacist or other pharmacy personnel, and the customer is on his or her way home. But what about the customer's expectations for this pharmacy visit?

This research shows that the complexity of the medication use system creates needs (the basic social problem) for community pharmacy customers. For community pharmacy customers, the needs created by the medication use system are addressed by the pharmacist acting on their behalf within the system. The pharmacist's acting, called interceding, is the basic social process which occurs in response to the customers' needs. Pharmacist interceding, which has phases of assessing and acting, is explained by the Model of Pharmacist Interceding.

Customer Needs: The Basic Social Problem

Thousands of customers enter community pharmacies every day. Some are picking up routine refill prescriptions, some are picking up a one time medication for an acute illness, and some are picking up new prescriptions for a chronic illness. For some customers the ideal pharmacy provides accurate and efficient service. For others, the addition of a personal touch is important. Regardless of these circumstances, all community pharmacy customers participate in the same complex medication use system, and at some point this participation creates a need(s) for the customer. Data from this study suggest that customer needs may be classified into three areas: the need for information, the need for a problem solver, and the need for reassurance. Because these needs may occur during any visit to a pharmacy, and because they will affect the customer-pharmacist interaction, it is important that they be examined. The remainder of this section is devoted to an analysis of the basic social problem of customer needs.

Need for Information

Customers enter the pharmacy with a variety of needs for information, ranging from a simple drug information printout to a detailed explanation of the best method for taking a medication.

Information Printouts. Many of the interviewees indicated that the drug information print-out that most pharmacies provide is useful.

> Each medication came with a sheet that explained in greater detail and that was great.

In fact one customer indicated that the printouts are even more important for maintenance medications.

> I like to get the detailed printout sheets, especially on maintenance, because . . . I still like getting them because there might be things that you've forgotten about.

Some customers are interested in even more detailed information about their medication (e.g., maximum dosage, name of manufacturer, how many different types of dosage).

> I want to know a lot, I want to know a lot. Because this is my body and if I'm not informed, then I inadvertently could do something that I wouldn't want to do.

However one pharmacy customer did indicate that "you can go overboard and waste a lot of paper on things". In other words, this customer saw no need for the printout every time a prescription is refilled.

Side Effects. Pharmacy customers seem to be particularly interested in receiving information about a medication's side effects. Learning about possible side effects prepares the customers for what lies ahead.

> It would help a lot. Not to have it come down on you suddenly, and you not know what drug's doing what.

Parents, in particular, need advance warning about a possible side effect from their children's medication. "Is there anything I should notice about their behavior?"

Additional Information. Pharmacy customers expressed a need for their pharmacist to inform them about any changes in the color, shape, or size of their medication. In addition, they want the pharmacist to inform them about any new information regarding their medication. Tips on administering medication are also

welcome. Finally, one customer suggested that pharmacies provide "an area of education while you're waiting." In other words, the pharmacy should provide a specific area in the store stocked with reading material about medications.

Need for Reassurance

To reassure may be defined as dispelling a fear or concern (The New Shorter Oxford English Dictionary, 1993). One of the problems that pharmacy customers face is the need to dispel any fears or concerns about their participation in the medication use system. Customers' needs for reassurance stem from three areas. They include emotional, dependability, and professional issues.

Emotional Issues. Emotional issues may envelop a pharmacy customer as they enter the store.

> There is another thing too that I think that pharmacists and physicians should understand, is the emotional thing that you are going through from your illness.

These issues range from wanting to talk to a need to feel safe. Customers understand that the pharmacist's job impacts their health, and because that is an important issue they need a pharmacist to care about them.

> Well it's concerning my health and my well being and the fact that someone is dispensing medication that could affect that health and well being, knows me and cares about what he is doing.

Pharmacy customers need their pharmacist to understand their family problems, listen to their gripes, and teach them how to give their baby medication the very first time. When they are feeling bad they want a "little sympathy." They need their pharmacist to be aware

of their emotional state.

> I think a pharmacist [who] works with that pharmacy ought to be aware that there are times when you go into a pharmacy and you're distraught. I think they ought to show concern.

Finally, pharmacy customers expect to find "someone you could trust" behind the pharmacy counter.

Dependability. In addition to the emotional issues encompassing the pharmacy interaction, customers need to be reassured that they can depend on their care giver. The consistency of the pharmacist plays an important role in a customer's assessment of dependability.

> Not too many rotating pharmacists. I don't like that, that's why I go where I go because I like to know who I'm talking to.

> There was always a different pharmacist so there was no consistent person that knew me, and that knew the drugs that my daughter was on . . . and I did not like that.

Customers want a pharmacist "that they can count on." They want to "know it's going to be the same people every time." Also, simple things like posting an emergency telephone number builds the customer's confidence in the dependability of the pharmacist.

> I like to know that if I got in trouble I could call - he has an emergency number to call his home.

Professional Issues. Finally, customers need to be reassured that their pharmacist is a medication professional. They "want to know how up to date he is." They need for their pharmacist to be able to help them work through the costs versus benefits of taking a medication.

> But when I talked to my doctor and talked to my pharmacist I realized that the benefits would outweigh, you know, what I was feeling at the time.

Also, they need for their pharmacist to know their medication history and to act on it.

> I feel confidant that, that number one my pharmacist will question if he thinks that there is something that I might not be able to take . . . because he knows my history.

In addition, customers want the pharmacist to respect their privacy and to provide follow-up care when needed.

Need for a Problem Solver

As stated previously, pharmacy customers face a complicated medication use system, and as with any complicated system problems develop. A variety of customer's problems were suggested, ranging from a perceived simple special order to complicated insurance issues.

Special Orders. In one instance, an interviewee recounted the story of needing calibration solutions for her child's blood glucose machine. The customer visited one pharmacy prepared with the serial number of the machine and the number for the company, hoping that if the items were not in stock that they could be ordered. However, the customer indicated that the individual that she spoke with "didn't have a clue," and he "never really offered to order them." Fortunately the customer did not give up and she found a pharmacy that did not have the calibration solutions, but worked through the system and replaced the whole machine. Now the customer did not expect that the whole machine would be replaced, but she did need the first pharmacy to attempt to help.

> If they had said we don't have it and we don't carry that, but we would certainly be happy to order it for you. Or to talk with our drug rep or whatever and get that for you.

Vacation Supplies. Several problems stem from customers and their vacations. For example, one customer indicated that he had a difficult time in obtaining needed medication prior to leaving on vacation. His frustration was increased because he knew that the pharmacist could provide the needed help.

> I'm going away for three weeks, oh I'm sorry I can't fill it, you're not due for another two and a half weeks. A pharmacist who cares about the person he's dealing with or she's dealing with will find a way to do that. I've had it done for me. I know it can be done. Not all of them will do it.

In another instance an interviewee spoke of a visiting friend and their frustration that the local pharmacist, an employee of the same pharmacy organization that she patronized at home, made no effort to contact her physician in order to verify and fill a Coumadin™ prescription. In a similar incident a customer recounted the story of being on vacation with her father. While on vacation in another state the father discovered that he had forgotten his blood pressure medication. They contacted his home pharmacy and requested that they send the medication to their location. "So he called down to the . . . and said I need you and they wouldn't send it." Not one to give up when she needed help, the daughter contacted her pharmacist, and explained the problem. She had a medication related problem and looked to her pharmacist as the problem solver.

Physician Back-up. Customers often look to their pharmacist to solve or prevent problems caused by physician error. For example, one customer told of a time when she received the wrong strength blood pressure medication. It seems that the physician had

mistakenly changed the strength, but she expected her pharmacist to catch and fix that problem. While her pharmacist did not catch the problem, the customer still believed that the pharmacist was in the position to do so. In another instance a customer, with many medication allergies, relied upon her pharmacist to keep records that would prevent her from receiving a medication she was allergic to.

Financial Issues. Many times throughout the interviews customers told of times when, for one reason or another, they felt they had wasted money when completely filling a prescription. One customer's mother seemed to have many allergic responses to medication.

> The pharmacist, suggested that he would give me a few pills when I got a prescription for her, give me only a few of the pills and see if she could tolerate them . . . Boy was that a lifesaver. Because I threw out so much medicine.

In another case, the pharmacist discovered that the customer seemed to be allergic to the fillers found in many medications. The pharmacist suggested that this customer get a trial of two doses each time she had a new prescription, saving her money.

Insurance Problems. Customers look to their pharmacist to solve all manner of insurance problems. One customer looks to the pharmacist to complete Medicare paperwork, "which is a boon to older patients." Another looks to her pharmacist to handle her Medicaid paperwork.

> See I'm on Medicaid and I don't take care of my paperwork. They absolutely do everything for me. . . . if I didn't have [name of Pharmacist] I would just be floundering.

For another customer the issue was whether his insurance company would pay for the brand name medication that he needed. This customer has a seizure disorder that is

regulated on a brand name medication. Generic drugs have not worked for him. So when his insurance denied payment for the brand name he looked to his pharmacist to solve the problem.

> I must have the brand name and that's the only one that works. . . . one of the biggest things that a pharmacist can do for you , is to perhaps, throw himself in the center and take care of details that you may or may not have the wherewithal or the knowledge to take care of properly.

Customers also approach their pharmacist to solve problems regarding hard to get medications, and product malfunctions. One mother turned to her pharmacist when her infant son had a difficult time keeping his medicine down. Finally, customers often come into the pharmacy when they are truly hurting. These customers look to the pharmacist to fill their prescriptions on a priority basis, allowing them to return home to heal that much faster.

Customers are faced with many unknowns each time they enter the pharmacy. Participation in a medication use system full of unknowns creates needs for those customers. Included are needs for information, needs for a problem solver, and needs for reassurance. Those needs are addressed by a process of pharmacist interceding. However, before the pharmacist can intercede or address the customer's problem(s), two conditions must exist. First the problem(s) must be recognized, and second the pharmacist must have the expertise to address the problem. Those conditions are discussed below.

Antecedent Conditions for Pharmacist Interceding

The preceding sections describe a variety of customer needs, needs that the customer expects the pharmacist to act on. However, before the pharmacist may act or intercede for the customer two conditions must be in place. First, the need must be identified and second, the pharmacist must have the expertise to intercede. The sections below describe those antecedent conditions.

Identifying A Need

In order for the pharmacist to intercede on the customer's behalf, a need must be identified. Identifying the need occurs through the giving and receiving of a cue. A cue, according to Oxford's English Dictionary (1993) is a word or phrase which serves as a signal to another actor to enter the play. A cue, in the context of pharmacist interceding, operates in the same way. That is, a signal is given by an actor (e.g., a customer) to another actor (e.g., the pharmacist) to enter the play (e.g., the medication use system). Cues are the signal to start the process of pharmacist interceding and may come from any of three actors: (1) the pharmacy customer, (2) other pharmacy personnel, or (3) the pharmacist.

The Pharmacy Customer. Cues to begin the process most often come from pharmacy customers themselves. All pharmacy personnel are possible targets for those cues. Straightforward cues may come in the form of questions. For example, one customer directly asked the pharmacist how to use his injectable medication. Another

asked the pharmacist about the best way to apply an eye ointment. Cues from customers may come from a statement made during a conversation with their pharmacist, and may be harder to detect. One customer indicated, during the regular course of conversation, that she was hoping not to take any pain medication. Still another described the allergy symptoms that she was having.

Pharmacy Personnel. Other pharmacy personnel (e.g., technicians, cashiers) also participate in identifying needs. In a busy pharmacy they are often the first and last pharmacy contact for the customer. Customers may present questions to technicians or cashiers in hopes that they will be passed along to the pharmacist. While all the actors in the system receive cues, judging the seriousness of cues they receive may be more difficult for technicians and cashiers. For example, in one case a customer entered the pharmacy to pick up some medication. Fortunately, the technician noticed that the customer looked very ill (a cue), called for the pharmacist's assistance, and the customer was immediately sent to the hospital. However, if the relatively untrained technician had missed the cue, a bad result might have occurred.

The Pharmacist. Cues may also originate within the pharmacist. Pharmacists may hear conversations between their technicians and customers that generate concern. They may notice a drug-drug interaction because they have access to customers' medication profiles. Finally, simply knowing the purposes and side effects of the medications themselves may generate a cue to act.

Miscues. Cues without notice lead nowhere. That is, customers may ask questions, or come into the pharmacy looking extremely ill, but if pharmacy personnel do

not notice these cues (i.e., attend to them) then the pharmacist cannot intercede. For example, one customer mentioned a fear of taking pain medications during her conversation with the pharmacist. The pharmacist, however, missed the cue and missed an opportunity to address this customer's need for reassurance. In another instance, a customer explained that she was having breathing difficulties (the cue). The pharmacist heard the cue and went on to explain why her medications may be causing the difficulties.

Pharmacist Expertise

Examination of the interview transcripts shows that pharmacist expertise is a condition that must be present in order for the process of interceding to be successful. Pharmacist expertise is defined as the set of special skills and knowledge that pharmacists have obtained because of their training and educational backgrounds.

Medication Experts. Pharmacist expertise includes the ability to understand drug-drug and drug-disease contraindications for both prescription and over-the-counter medications. One customer explained, "He said something about me picking up [over-the-counter remedy] one day and he goes, now did you read that pamphlet, that [over-the-counter remedy] sometimes has a reaction to [prescription medication]." Another customer explained.

> I'm sure he has to be heads up to any interaction type things that may be going on so that somebody hasn't actually written something that doesn't go with another thing. That you would run up a flag on the thing and say look this needs to be looked into before dispensing.

Expertise includes a knowledge of "how it [medication] affects you." In other words, pharmacists must be an expert in medication side effects. Pharmacists must have the expertise that allows them to confirm and extend any medication related information that customers receive from their physicians.

> It's also nice that if I go in and I have met with the neurologist and I'll say you know what she said about a drug, what do you think.
>
> But I've usually already asked the doctor and I'm looking for [the pharmacist] to confirm or relay any other things he has seen.

In one instance a pharmacist declined to dispense a prescription that a patient had seen on a television advertisement and requested from her physician. The pharmacist recognized that the drug could cause harm and stopped the dispensing process.

Customer Experts. Pharmacists must also be customer experts. Because they may be the one consistent health care professional that a customer visits, pharmacists must have the ability to understand and act on the medication history of the customer. For example, one customer suggested that "number one, my pharmacist will question if he thinks that there is something that I might not be able to take, that I shouldn't take or anything, because he knows my history."

System Experts. Pharmacists must also be experts in the medication use system. Pharmacists must understand the relationships between themselves and other health care providers. They must have a clear understanding of the rules under which they practice. Finally, pharmacists must understand the payment system for prescription medication. Evidence of the need for this type of expertise may be found in the interview transcripts. For example, one customer needed a specific brand name medication. His pharmacist had

to be an expert in the insurance payment system in order for that customer to receive his medication. In another instance a customer reported that her pharmacist would not leave her without medication for a day. This required the pharmacist to understand the working relationship between himself and the physician, and the rules under which he practiced.

Summary

Participation in a complicated medication use system creates needs for community pharmacy customers, and they expect those needs to be addressed by another participant in the system, their pharmacist. Included are the customers' need for information, for reassurance, and for problem solving. Pharmacists address those needs through a process of interceding, but two conditions, identification of the need and pharmacist expertise, must be present prior to the act of interceding. The process of pharmacist interceding is discussed in the following chapter.

CHAPTER 5
PHARMACIST INTERCEDING

Interceding may be defined as acting on behalf of another. Specifically, in this study, interceding refers to the pharmacist acting on behalf of a customer in our medication use system. Because interceding is a process, not a static event, a series of phases occur. Data from this study showed that the process of interceding has two phases: (1) assessing, and (2) acting. Each is discussed below.

Assessing

Once a problem has been identified the process of pharmacist interceding may begin. The first phase in this process is assessing. During the assessing phase of interceding the pharmacist works to understand the real issue underlying the identified problem. That is, the pharmacist evaluates the identified problem.

The process begins, says one pharmacist, with an effort to let the customer know that they have the full attention of the pharmacist. The pharmacist focuses on the customer and attempts to relay the feeling that she is receptive and willing to talk. This pharmacist finds that customers are more willing to talk, and "give you the whole story" when they feel comfortable. Once the customer is talking, assessing may begin in earnest.

During conversations with customers, pharmacists said that they listen to the questions posed by their customers. They assess the customer's level of comprehension through responses to their questions, the language used, their past history with the customer, and the apparent educational level of the customer. Pharmacists echo back the customer's responses in an effort to make sure that they really understand the customer. While echoing back the customer's statements, the pharmacist gets clues from body language and facial expressions. These clues allow the pharmacist to judge the customer's receptivity and understanding of what they are discussing.

Once the pharmacist is sure of the issue at hand, an internal assessment begins. That is, the pharmacist asks, do I have enough information, do I have enough knowledge, should I look something up, or should I make a referral? The pharmacist is concerned that the right response is provided. When the pharmacist fully understands the issue at hand and feels capable of handling the issue, interceding moves to the acting phase.

Acting

Acting on an identified customer need is the core of pharmacist interceding. Without action there is no process, no interceding. Because of the wide range of needs expressed by customers, pharmacists act in a variety of ways. Their actions may be categorized as follows: (1) problem solving, (2) educating, and (3) reassuring.

Problem Solving

The need for problem solving generated the most diversity in pharmacist action. Examples found in the data include completing Medicare paperwork, providing a delivery service, and opening charge accounts for customers in need. While pharmacy customers report a wide variety of problems, two categories of problems seem to emerge. They are (1) problems stemming from the bureaucracy of the medication use system, and (2) problems stemming directly from the use of the products found in a pharmacy .

The Bureaucracy. The medication use system is no different than any other large system. It has layers of bureaucracy that create problems for those involved in the system. Pharmacists are constantly called upon to work through the layers and solve their customer's problems. For example, pharmacists often work to solve insurance problems. These problems may include making sure the customer has a vacation supply of medication, getting the customer a needed brand name medication, and assisting the customer with a new plan. One customer needed a new blood glucose machine for her child. The pharmacist provided and participated in the step by step procedures required by the insurance company.

> Well we don't carry those any more, but if you will go over to the pediatrician and get another prescription for it we'll give you a new kit and it was free . . .She gave me a solution.

Pharmacists often act to make sure that their customers do not go without medication. This may occur because a physician has not answered a request for a refill or because a customer simply forgot to call the refill order in on time. For one customer solving the problem meant having access to experimental seizure medications for her

daughter. The pharmacist was able to help. "I can remember being on experimental drugs and [the pharmacist] was able to get them." In another case a customer's car was stolen. The pharmacist was able to replace the medication stolen along with the car.

One customer recounts a story of being in great discomfort from a medical procedure. At home, she noticed that she had mistakenly asked the pharmacist to fill the wrong prescription. She returned to the pharmacy, explained her problem to the pharmacist, and he promptly filled the needed prescription.

> I guess that he saw that I was in so much pain and remembered that I was there . . . what he did was, on his own, went on and filled mine, okay while there were other people there so I could leave.

In each of these cases the pharmacist understood and worked through the rules of the particular bureaucracy to solve the customer's problem.

Product Use. A variety of products may be found in any community pharmacy, and the use of those products creates a variety of problems. Several customers reported having numerous allergies to medications. These allergies created possible health and financial problems for the customer. The pharmacist was able to alleviate these problems by: (1) dispensing only a few pills at the first dispensing of a new prescription, and (2) keeping and using computer records which allowed him to keep a watch for any possible problems. Pharmacists may also act to solve problems of medication compliance. For example, a shorter duration antibiotic was suggested to a Mom whose child fought taking medicine. Some customers may have a problem choosing an appropriate over the counter therapy. The pharmacist is able to assist the customer in a choice of over the counter medication.

> I told him what was going on and he knows I have to take blood pressure medication, so he watched that and you know, he went out on the floor there and he looked at different possibilities.

Finally, one pharmacist reworked a durable medical equipment item so that it would fit his customer's thumb.

> If I've got a particular problem . . . not to long ago I had tendinitis in my thumb, and I was just at a loss. I kept trying to find . . . a splint for my thumb . . . and the pharmacist said, I think I've got something that will work. And he fooled around with it until he got it to work.

Educating

Pharmacists act to educate their customers in several ways. An assessed need for information may be met by providing the customer with a drug information sheet.

> I have noticed that every time that I have gotten a new medication I also at the same time get a computer printout with it that has all kinds of interactions, notifications, and warnings of any kind, side effects and things of that nature. And yeah, sure that's a great thing to have in there.

In some instances the pharmacist educates through conversation. One customer said "he's gone into his big book and read things to me." In other instances, the pharmacist educates by demonstrating. For example, pharmacists are frequently called upon to teach people how to properly administer medication. One pharmacist was observed showing a customer the correct technique for using an injectable medication. In another instance the pharmacist taught a Mom how to give an infant medication.

Reassuring

Pharmacists reassure their customers in a variety of ways. One customer, who indicated that she always checks her health care providers credentials, was reassured because "his credentials are on the wall." In another case a customer was reassured by the reaction of the pharmacist to a mistake made in his pharmacy.

> It's a terrible thing that happened . . . I mean I can't dismiss the severity, but they were responsive right away . . . come in and get what you do need, you know, it's not oh, we're sorry. You know they helped me all the way through it.

The customer felt that because of the pharmacist's reaction to the mistake, pharmacy personnel would be more careful in the future. Pharmacists reassure their customers when they make themselves available for questions. They reassure their customers when they come from behind the counter and sit down to explain and show a mother how to administer drugs to a fussy infant.

> I was just so upset and frazzled over the whole thing. He made me comfortable about giving him that medicine and stuff . . . By talking to me and he came out and actually went into his [the baby's] pumpkin seat and said let me show you how you could give it to him and he did an eyedropper with a little bit of water and he said if you put it into the side, he said almost like a kitten and blow on his nose a little bit, he'll swallow.

Customers are reassured when their pharmacist pre-warns them about changes in their medication. For example, one customer spoke of a change in the manufacturer of her child's medication. She was glad that her pharmacist informed her of the change before she left the store, alleviating the anxiety that she might have felt later without the warning. Customers are reassured when their pharmacist acts to show concern. For one customer this meant that the pharmacist called to make sure that she was taking her medicine

correctly. For another customer it meant the pharmacist taking her for medical care. After that event the customer was surely reassured that the pharmacist would look out for her well-being. Finally, one customer indicated that she was reassured that the pharmacist respected her privacy, because he had never asked any invasive questions.

Pharmacist interceding is a complex process that goes on in an ever changing medication use system. Because pharmacist interceding takes place in a system of care, a variety of conditions may influence it. They are discussed below.

Conditions Influencing Pharmacist Interceding

The process of pharmacist interceding takes place in a complex medication use system. Therefore, there are several surrounding conditions which influence interceding. Influencing conditions discovered within the data include the pharmacy environment, time, social structural variables, and the personalities of both the pharmacist and customer. Each is discussed below.

Pharmacy Environment

Community pharmacies may be found as stand alone units, as departments within a grocery store, in clinics, and as departments within a general merchandise store. Because pharmacies are located in many different types of establishments a variety of environments surround the pharmacy. This variety of environments and the specifics of the pharmacy set-up may influence the process of interceding. Included as factors in the pharmacy

environment are the physical set-up of the pharmacy, the focus of the establishment that includes the pharmacy, and the number and types of personnel working within the pharmacy. Each is discussed below.

Physical Set-Up. While pharmacies have some common physical features, not all are set-up in the same way. For example, the dispensing area of the pharmacy is most often found behind a counter of some sort. However, in some pharmacies the dispensing area is also on a raised platform, or behind glass windows, or beyond a window, or two counters back. Because the pharmacist operates in the dispensing area, this physical location becomes an important issue for interceding. Observations of pharmacists at work confirmed this point. For example, in one pharmacy the pharmacist was generally found working at a dispensing counter on floor level, with no other barriers. This pharmacist was constantly involved in the interactions with customers. With this easy access dispensing area, customers were able to easily cue the pharmacist when a need arose. In addition, the closeness of the pharmacist to the customer enabled her to initiate interceding as she judged necessary. Contrast this with the pharmacy in which the dispensing area is located two counters back. That is, in one of the observed pharmacies, the pharmacist primarily worked at a dispensing counter which was located behind the main pharmacy counter. While this physical set-up may create an efficient dispensing process, it places two physical barriers between the customer and pharmacist. Observations in this pharmacy showed that it was difficult for customers to directly cue the pharmacist. In fact, at one point, thirty-five minutes elapsed before an interaction between a pharmacist and customer was observed after the pharmacist dispensed the customer's medication.

Physical barriers may not always interfere with the process of interceding. In one pharmacy, where the dispensing area was located on a raised platform, one customer was not deterred. He simply placed his prescription on the top of the counter and spoke with the pharmacist. In this same pharmacy, the pharmacist consistently greeted customers from the platform, almost as if it were an observation post from which he could keep an eye on the pharmacy. Rather than deterring interaction, the platform seemed to facilitate interaction.

Pharmacy Focus. The focus of the store in which the pharmacy is located may also influence the process of interceding. Some pharmacies are departments within stores that sell a wide variety of merchandise, and some are within stores that focus on medicine and other health related items. One customer indicated that "you go into some of them . . . and it's just a little department shoved in the back somewhere. And that doesn't feel important enough to me." For this customer, the focus on medicine signals that it is okay to express a need for pharmacist interceding. Customers who patronize a pharmacy that focuses on health care more often described their pharmacies as warm, homey, or comfortable. Perhaps this environmental factor enables the customer to feel comfortable expressing a need.

Pharmacy Personnel. Another environmental factor which may influence pharmacist interceding is the number and types of personnel working in the dispensing area. Pharmacies tend to employee three types of personnel to work within the dispensing area: pharmacists, pharmacy technicians, and cashiers. Clearly the addition of layers of personnel between the pharmacist and customer may influence the process of interceding.

In one store that employed all three levels of personnel, customers had infrequent chances to cue the pharmacist about a need. The levels of employees acted as a barrier to the pharmacist. That is, customers generally interacted with cashiers or technicians before they were able to interact with a pharmacist. However, in another three level store, the pharmacist had frequent interactions with customers. This may indicate that the number of employees between the pharmacist and customer becomes a barrier only when other factors come into play. Those factors might include store policy and pharmacist time.

Time

The process of pharmacist interceding may be affected in several ways by time. That is, time is a multi-faceted issue that affects both customers and pharmacists.

Customer's Time. Effective use of time is important to customers. One customer indicated just how important her time is.

> The other one [insurance plan] would cost me less money out of my paycheck each year and I chose to pay, more money to stay at [name of pharmacy]. That's how valuable my time is.

This customer had previously related instances in which she felt her time had been wasted at other pharmacies. She chose a pharmacy where she perceived the wait time was low. Other customers also indicated that they are interested in fast service. This desire for fast service may adversely affect the pharmacist's ability to appropriately intercede on the customer's behalf.

Pharmacist's Time. Pharmacist's interceding is also affected by the amount of time available for the process. The amount of time available may be affected by the

prescription volume of store as well as the assignment of personnel to the various dispensing tasks. For example, in one high volume store the pharmacists had little time available for interactions with customers. Most of the pharmacists' time was spent filling prescriptions and answering phone calls. Cashiers and technicians were assigned the tasks involving direct customer contact, not the pharmacist. However, in another high volume store the dispensing tasks were set up so that the pharmacist did have time to intercede.

Social Structural Variables

The medication use system is replete with social structural variables that influence pharmacist interceding. Those variables seem to fall into two categories, government regulations and insurance regulations.

Government Regulations. Government regulations, both state and federal, provide the pharmacist with a practice template. That is, those agencies decide and subsequently describe how a pharmacist is to practice pharmacy. One regulation that may affect pharmacist interceding is the requirement that all pharmacy customers be offered counselling (i.e., the chance to talk to a pharmacist). In some pharmacies the cashier or technician makes a verbal offer to the customer. Imagine the observed difference between an offer of, "you don't have any questions for the pharmacist do you," and "what questions do you have for the pharmacist today?" The first question places an obstacle in the way of interceding, the second opens a direct path for the pharmacist to intercede.

Insurance Regulations. Insurance rules and regulations also affect the process of pharmacist interceding. In today's medication use system, most customers' prescription

insurance claims are adjudicated online. That is, the insurance claim is electronically transmitted to the insurance company as the prescription is being filled. The pharmacy knows immediately whether the prescription is covered or not by the customer's insurance, and in some instances the pharmacist is provided with additional information. This online adjudication provides an opportunity for the pharmacist to intercede in several ways. For example, when one drug is not covered the pharmacist knows immediately and he may suggest another medication. In another instance the customer may be patronizing several pharmacies, online adjudication may reject a prescription because of an interaction with a drug dispensed at another pharmacy. The pharmacist may then act to suggest a different, more compatible medication. Insurance regulations may also act to hamper a pharmacist's ability to intercede. For example, insurance companies dictate the quantity of medication that a pharmacist may dispense. They may also provide a formulary of covered medications.

Personal Characteristics

A final factor that may affect the process of interceding is personality type of both the pharmacist and customer. Time and time again customers stated that they want their pharmacist to be friendly, to be polite, and to take a personal interest.

> But he is a very personable person and he seems to take an interest in all people. He calls most people by name, that I like.

A seemingly open and friendly pharmacist may open the way for a customer to express a need. However, the personality of the customer may be just as important to the process.

For example, one customer indicated that her pharmacist "appears to be very stiff, but he's very nice to me. Very nice to me." Perhaps this customer's personality, open and friendly, allows the pharmacist to be open to the possibilities of interceding.

Summary

Because of the complicated medication use system in which they participate, pharmacy customers develop needs. Those needs include a need for information, a need for reassurance, and a need for a problem solver. Together they comprise the basic social problem that pharmacy customers face. The basic social process which addresses those needs is pharmacist interceding. Pharmacist interceding may be defined as the pharmacist acting on behalf of a customer in the medication use system. Pharmacist interceding as a process includes the phases of assessing and acting. The process is preceded by two conditions, problem identification and pharmacist expertise, and it is influenced by a group of factors including, pharmacy environment, time, social structural variables, and personal characteristics. But what happens after the pharmacist intercedes? What are the consequences of pharmacist interceding? That final piece of the model is discussed in the following chapter.

CHAPTER 6
THE CONSEQUENCES OF PHARMACIST INTERCEDING

Pharmacy customers present their pharmacists with a variety of needs, and pharmacists respond to these needs by interceding or acting on behalf of their customers in our medication use system. But what are the consequences of that interceding? Data from this study indicate that a relationship is formed between customer and pharmacist. That is, a connection or association is formed between the two. While some commonalities among the data were found, not all customer- pharmacist relationships are alike. Findings from this study show that relationships may be classified into one of two types: professional and personal. In the following sections, a description of the two relationship types is presented. This is followed by six cases or in depth descriptions of the processes described by the Model of Pharmacist Interceding.

Professional Relationships

The formation of a professional relationship between customer and pharmacist seems to be common to all pharmacy customers. In other words, the minimum consequence of pharmacist interceding is the formation of a professional relationship between the customer and pharmacist. For this study, a professional relationship may be

defined as an association between pharmacist and customer which focuses on the customer's medication use. This relationship is role based, and is formal in nature. In a professional relationship, there is recognition of the partners and a purposive exchange. Pharmacists and their customers recognize each other, have some affinity for each other, but focus their interactions on getting the prescription dispensed: accurately, efficiently, and safely.

Personal Relationships

Personal relationships may also be a consequence of pharmacist interceding. While personal relationships included some of the same elements as a professional relationship (i.e., recognition and accurate, efficient, safe prescription dispensing), they also include an increased level of personal involvement. Pharmacy customers who formed a personal relationship related instances in which their interactions with their pharmacists included discussions of family and work matters, and they more often referred to their pharmacist as a friend. Also, at this level, customers reported that their pharmacist acts to provide an extra degree of service.

Cases

So that the reader may have a better understanding of the consequences of pharmacist interceding as well as the Model of Pharmacist Interceding as a whole, the

remaining section of this chapter includes six case descriptions. The cases were chosen because they illustrate a range of customer needs, pharmacist action, and type of relationship formed. Cases one, two, and three describe instances in which a professional relationship is formed. Cases four, five, and six illustrate the process as it ends in a personal relationship.

Case One

At the time of the interview Bonnie* was a sixty-three year old semi-retired certified nursing assistant (CNA). She visited her pharmacy, a chain store, every week on average, due in part to her job as a CNA. While she does have two chronic illnesses, she characterized her health status as good. Bonnie bears the entire obligation of paying for her medication. Her story provides us with an example of the progression from customer needs through pharmacist interceding to building a professional relationship.

Throughout her interview, Bonnie expressed needs for information. For example she suggested that the pharmacist should make you aware "you can have reactions by taking this medicine." Also, she indicated that the pharmacist was the one to ask about medications that she wanted to try. She found "that the pharmacist has a lot of update on the medicines that doctors don't have," and with this statement revealed one of the conditions for interceding, that is pharmacist expertise.

Bonnie's expression of her need for information, a question for her pharmacist, is an example of customer need identification. Bonnie cued her pharmacist that she needed

* all names are pseudonyms

some interceding, but in this case the process ended.

> I've went to the drugstore before and asked a pharmacist, well what do you think about a certain drug. And the pharmacist would say well it's up to the individual. Well I didn't want that answer. I wanted an answer like well have you ever taken this or that and how did it react? Well this is the one I think, why don't you try this one? I think he should be more knowledgeable and more information, give you more information.

This pharmacist did not attend to Bonnie's cue, resulting in no interceding. Bonnie tells of another time when she visited her pharmacy.

> I got a prescription one day and I didn't understand it and he didn't have time to tell me about it. So I thought oh well, he'll give me a slip and I'll know a little bit more about it, but he didn't. So I started going to a drugstore that was farther away, but they talked to me when I went in.

This time Bonnie had a need for information that was not met. The pharmacist did not intercede so Bonnie went looking for a pharmacist who would meet her needs. Bonnie goes on to say that "the next time I had to have a prescription filled I tried them (again). I liked the way they explained things to me." This new pharmacist was able to identify, assess, and act (i.e., intercede) on Bonnie's needs. As a result of the interceding, a professional relationship has formed between Bonnie and her pharmacist.

> I would want to go where I liked the pharmacist. Because the pharmacist I was going to just got a new job so I may switch.

Bonnie is willing to change pharmacies so that she has the opportunity to work with the same pharmacist.

Case Two

At the time of her interview, Joan was a thirty-nine year old human resources generalist. She visited her independent pharmacy four to six times each month. Joan characterized her health status as good even though she has a chronic illness. She shares prescription payment obligations with her insurer. Her story provides us with an example of pharmacist interceding that leads to a professional relationship.

Joan classifies herself as a "very informed medical patient. Because I have a lot of things wrong with me." This classification drives her need for information. Because they know her, Joan's pharmacist will provide her with specific information tailored to her medication profile.

> They will mention, don't forget, you need to take this with food, because of your bad stomach. Okay, or you've never had this before, this may make you drowsy.

Joan also relies on the information sheets provided with each prescription. She reads those sheets from beginning to end every time she has a prescription dispensed, and she calls her pharmacist if she has any questions.

> Oh, I would never call the doctor. . . . Because, you know what, the pharmacy knows more about drugs, I think, than the doctor does. Especially the interactions to be perfectly honest with you.

Joan also indicated that from time to time she has the need for a problem solver. She tells of one instance when she had injured her back. Two prescriptions were phoned to a pharmacy and even though she was in pain she was told that the wait for the prescriptions would be an hour and a half. Joan had a problem, pain. In this case, the pharmacist did not identify or cue into the pain. Therefore there was no interceding and

no relationship. In fact, Joan called the pharmacy supervisor for this pharmacy to relay her displeasure. She indicated that she will not return to that pharmacy. However, Joan does tell of a pharmacist that will help her solve this same problem.

> And when you bring in a prescription for pain medicine or something he knows where you need it right away. He'll bump your prescription up, so that's nice.

Joan knows the name of her former pharmacist and "he remembers my name" even though she moved and he has not been her pharmacist for six years.

Time is a very important issue in Joan's life. In fact, one of the reasons that she patronizes her current pharmacy is the efficiency with which they dispense her prescriptions. They have recognized that wasting time is a big problem for Joan and they have acted to solve the problem.

> They are fast and let me tell you, what has kept me there. Something in addition to that. That this year we have more than one type of HMO [health maintenance organization] that I like. It's a point of service HMO and we have two this year to choose from. The other one would cost me less money out of my paycheck each year and I choose to pay more money to stay at [name of pharmacy]. That's how valuable my time is.

Joan has formed a professional relationship with the pharmacist who values her time, provides her specific drug information, and respects her privacy.

Case Three

George was a forty-three year old project director at the time of his interview. Like Bonnie, George patronizes a chain pharmacy, but very infrequently. He says his health status as "somewhere between fair and good." His insurer covers the complete cost of his medication. George's story illustrates the formation of a professional relationship.

While George is an infrequent patron in his pharmacy, he did express a need for information during his interview.

> Tell me about the medication. What are the side effects, how do you take it, if there, if you should take it with dinner, with water, what not to take it with, so that, you know there's obvious stuff like don't take it with alcohol, but if there's other things that you can take it with that could possibly make you sick of something, or queasy or uncomfortable. . . . And if they are aware of other medications that are out now that will address the same or similar issues.

George expects his pharmacist to be able intercede and provide this information. He tells of a time when he had a need for information and the pharmacist did not help.

> I started asking questions and they couldn't answer it, they didn't know and as a consequence I thought they didn't know and that was the reason for their being curt with me. I'm trying to find out what I need to know and they were well your doctor gave it to you isn't that sufficient.

In this case, the pharmacist did not identify and act on George's need for information. When asked how the pharmacist could have made things better, George replied as follows.

> Answer my questions. And not tell me, if you don't know, it's perfectly okay to say you don't know. . . . Just say well Mr. X I'm really not sure. It would probably be best if you could talk with your doctor about this in more detail. And that's fine. Then I can choose to come back or not come back to that pharmacy.

George currently patronizes a pharmacy where he likes "this place because the guy explains everything." The pharmacist is "friendly and open." Also, he remembers a pharmacy in another city "where the guy would explain what you had, but it wasn't like I was talking to my best friend or anything, but he did his job." This last sentence seems to summarize George's professional relationship with his pharmacist. That is, he has a need for information, and the pharmacist acts to meet that need in the context of the professional relationship between customer and pharmacist.

Case Four

At the time of her interview, Moira was a fifty-two year old disabled medical technician. Moira suffers from an illness that does not allow her to work. She patronizes her independent pharmacy at least monthly, and her prescriptions are completely paid for by a third party.

While Moira expressed needs for information, the clearest depiction of relationship building stems from her need for reassurance.

> I checked and [name of pharmacist] was there and I was glad. . . . He knows all of my medicines and he knows what to tell me about them or if there are any problems about them.

Having one pharmacist available reassures Moira that "they know her and they pay attention to what you're doing."

> Not too many rotating pharmacists. I don't like that, that's why I go where I go because I like to know who I'm talking to.

Moira has clear evidence that her pharmacist pays attention to what she is doing.

> I mean one day, I'll just tell you, I was very sick in the pharmacy and [name of pharmacist] saw that I was because he knows me, he just took me to the hospital. . . . But the point is that he saw it, he recognized it and he knew that I needed to go and he helped me.

In this instance, the pharmacist identified the customer's physical state, assessed the need for immediate medical attention, and interceded by getting the customer the needed medical care. Moira feels certain that her pharmacist would act to help her, no matter what.

> If [name of pharmacist] couldn't have done it, he would have found someone who could have done it.

Because of the interceding Moira has formed a personal relationship with her current pharmacist.

> I go down to Shands and [pharmacist] familiar with that. He knows what's going on. He knows that partly because I've told him and he's listened and remembered.

Case Five

Betty was a sixty-one year old homemaker at the time of her interview. She patronizes an independent pharmacy, and visits about every two weeks. She does have some chronic illnesses, but says she is in good health. Betty shares the responsibility of payment for her medication with her insurance company.

Betty expressed all three needs throughout her interview. She looks to her pharmacist to solve problems with insurance coverage, out of stock items, and vacation supplies of medication. She needs her pharmacist to provide her with extensive drug information, to advise her of interactions with her current medications, and to suggest over the counter medications. Betty needs reassurance that her pharmacist "is up to date on his, with the knowledge of medicines that are coming up." This reassurance comes in the form of credentials in plain sight. Betty wants her pharmacist to show concern when she comes in distraught. She also revealed the condition of pharmacist expertise during our conversation when she said that her pharmacist should "be an expert in what type of medicine he's giving me."

Throughout our conversation Betty shared several instances that provided a pharmacist the opportunity to intercede.

> I went to a particular pharmacy, presented my prescription and my medical card, my medical insurance card and I was promptly told we don't take this medical insurance. Do you know where I can go to get this filled? I was under the impression that you did take it, well we don't. End of subject, end of conversation and their back was turned to take care of someone else.

Betty needed someone to help her solve her problem, but instead she found a pharmacist who missed a cue. Betty ultimately solved her own problem by going to another pharmacy, but the first pharmacy missed an opportunity to build a relationship with Betty, and has now lost her as a customer. As Betty said "now I would not go in there, I just wouldn't, I just would not do it."

Betty relates another instance in which a pharmacist had the chance to solve a problem by using his expertise and interceding.

> I called, I had a hard time breathing, I had post nasal drip there in the back. And I get really stuffed. Well I don't need to go to the doctor to find out about that, but I can call my pharmacist and say look I feel this. My head is hurting, I know you can't prescribe . . . but I would say, what is there over the counter that you can tell me that I can take and he'll ask me well what are the symptoms, I tell him, he tells me what I can buy over the counter. . . . That saves me a trip, an unnecessary trip to the doctor. . . . it makes me feel like I have somebody I can go to, over the phone, that is going to help me.

Clearly in this instance the pharmacist acted on the cue given by Betty, and in this case a relationship has been developed. Betty patronizes the pharmacy where this pharmacist works. Like others who formed a personal relationship, Betty described the pharmacy as having a "homey atmosphere" and being treated as if "we're old friends."

Case Six

At the time of the interview, Ann was a sixty year old paralegal. Ann visits her independent pharmacy about three times a month. She does have a chronic illness but characterizes her health as good. Ann shares payment responsibilities with her health insurance company.

Like Betty, Ann expressed needs in all three categories. She expressed a need for information about new products, and a need for her pharmacist to recommend an over the counter product. Ann needs to be listened to when she was feeling bad, and to feel safe in her pharmacist's choices. She also needs her pharmacists to help her solve problems. For example, Ann was having difficulty taking medications. It seems that she was allergic to them. It was her pharmacist, however, that "determined that I was allergic to fillers, not so much the medication but the fillers." Finally discovering the source of the allergy was important, but the allergy problem was still present. So, Ann's pharmacist interceded again.

> And what we did, and he suggested it, when would get a prescription for a drug, he would give me two pills, and he said use this . . . If it worked, then he would go ahead and fill the prescription.

Ann reports other instances in which her pharmacist interceded. At one time she spent six weeks looking for a splint for her thumb, but found none that fit. Her pharmacist upon learning about the problem, "fooled around with it until he got it to work." At another time her pharmacist assisted her in getting medication for her father while they were out of town.

Each of these instances of pharmacist interceding builds on another, creating a long lasting personal relationship between Ann and her pharmacist.

> Personal service is just what I said, the relationship I have with the pharmacist in cooperating with me and not, and in knowing me . . . I've been trading there since 1977.

Pharmacy customers present their pharmacists with a variety of needs. Those needs give the pharmacist the opportunity to intercede on their customer's behalf. The cases outlined above show that the consequence of pharmacist interceding is the formation of a relationship between the pharmacist and the customer.

CHAPTER 7
SUMMARY AND RECOMMENDATIONS

Summary

The purpose of this research was to generate a substantive theory that explains customer expectations of community pharmacy services. Using the grounded theory approach, pharmacy customers were interviewed and observed in order to identify and understand the basic social problem they face as well as the basic social process used in addressing the problem.

Pharmacy customers participate in a medication use system that is complex and confusing. The complexity of the system creates a set of needs for pharmacy customers. Findings from this project show that the basic social problem of needs is addressed by the basic social process of pharmacist interceding. In response to customers' needs the pharmacist engages in a process of interceding that results in a relationship between the customer and pharmacist. Pharmacist interceding, which is explained by the Model of Pharmacist Interceding (Figure 1) includes the phases of assessing and acting. The formation of a relationship between the pharmacist and customer is the outcome of the process of interceding.

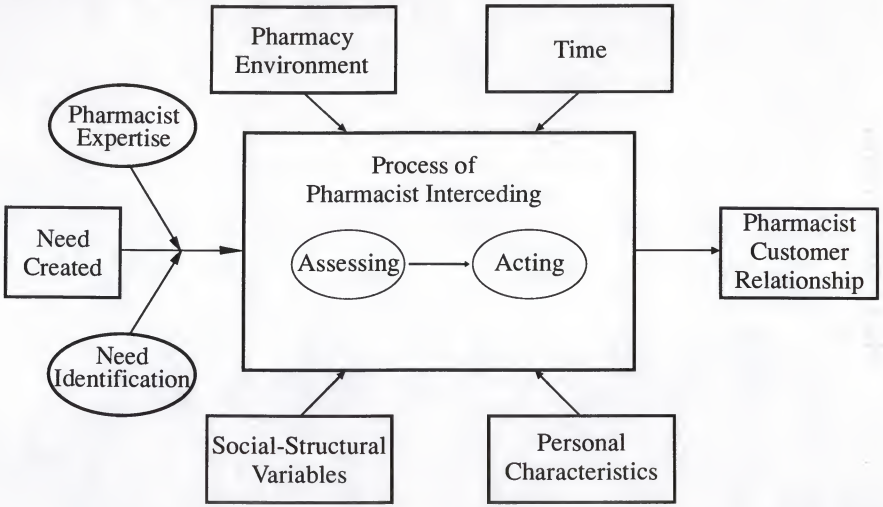

Figure 1.
Model of Pharmacist Interceding.

Each component of the Model of Pharmacist Interceding makes an important contribution to understanding customer expectations, keeping in mind that customer expectations are part of an interaction process. The basic social problem of customer needs provides us with the starting point of understanding. Customers enter the pharmacy with some need(s). These needs act as a precursor to the customer's expectation(s). In other words, a customer with needs has the expectation that their pharmacist will act on their behalf (i.e., intercede) in the medication use system. If we understand the needs, then we are able to teach the pharmacist to recognize them.

The next component of the Model includes the basic social process, pharmacist interceding. Understanding that pharmacist interceding has the phases of assessing and acting provides another opportunity for intervention. That is, we can teach the pharmacist how to recognize cues, assess them, and act on them in order to meet the customer's expectation of intercession. In addition, pharmacist interceding takes place in a medication use system that imposes certain conditions on the process. Understanding the issues of pharmacy environment, time, social structural variables, and personality type provides the pharmacist an opportunity to keep a watchful eye for any effect on interceding.

The final component of the Model is the outcome or consequence of pharmacist interceding, the formation of a relationship between the customer and pharmacist. Knowing that a relationship is the outcome of interceding shows the pharmacist the importance of interceding.

Relationship of the Model of Pharmacist Interceding to Other Research

The expectations construct has been studied over a period of many years, with varying results. The Model of Pharmacist Interceding is not meant to replace previous work. Instead this Model will act as an adjunct to improve the outcomes of expectations research. Previous work in expectations has a primarily deductive origin. That is, the research process was designed to test hypotheses based on a specific theoretical perspective. The development of this model followed the grounded theory method. Grounded theory uses an inductive approach in order to provide an explanation for behavior. In other words, the developed theory is grounded in the study data. This new approach to expectations research provides several advantages. For example, the actors in the process provide the data from which the theory or model is built. This allows for a theory that describes the problems and processes that are important to the participants. Also, the grounded theorist is not tied to another researcher's ideas. In grounded theory the data tell the story, an idea (theory) is not imposed upon the data.

Comparison of the Model of Pharmacist Interceding with other pharmacy expectations research shows some agreement. For example, DeSimone, Peterson, and Carlstedt (1977) began their study with an idea that customers had some needs and an expectation that their pharmacist might meet those needs. However, their research focused on the number and types of questions posed by pharmacy customers, using pharmacists as the data recorders. Their focus on customers asking questions limited their findings and did not allow them to completely tap the customers' perceptions. In this

study, question asking is a way that customers may identify a need. Need identification (i.e., question asking) was found to be a component of the Model of Pharmacist Interceding, not an explanation for the expectations construct.

Other pharmacy researchers have included the expectation construct in a studies of customer satisfaction. The advantage of this study is the focus on customer expectations, and the processes surrounding that construct. Results are not muddied by the intrusion of other constructs.

Limitations

The purposive sample for this study included twenty-seven community pharmacy customers. While data were collected until saturation, the proportion of independent pharmacy customers to chain pharmacy customers was a limitation of this study. Because the choice of type of pharmacy may indicate a difference in customer needs, a more diverse sample could strengthen and improve the Model. In addition, more women than men participated in the interviews. While women are the most frequent pharmacy customers, additional interviews of male pharmacy customers would strengthen the results. Finally, participants in the study came from all socio-economic backgrounds, but the addition of participants at the lower end of the education spectrum would be beneficial, as they may have additional and/or varied needs.

Recommendations for Pharmacy Practice

When a customer enters a pharmacy, they are usually entering a world that they do not understand. As health care professionals, pharmacists have a duty to recognize and act on their customers needs. The Model of Pharmacist Interceding provides pharmacists with new insight into the needs created by the medication use system for their customers. The Model shows pharmacists that their customers expect them to intercede (i.e., act on their behalf) in a system that is complex and confusing. Finally it demonstrates that the consequence of pharmacist interceding, is the formation of a relationship between pharmacist and customer. Pharmacists may find that the Model is useful in assessing their practices.

Recommendations for Future Research

As health care professionals, pharmacists and those involved in pharmacy research have a responsibility to their customers. This responsibility includes both making sure that the customer has the right medicine at the right time, and interceding on behalf of that customer in our complicated medication use system. The ability to intercede on the customer's behalf will be enhanced by research aimed at further understanding the problems and processes that pharmacy customers face.

Recommendations for research taken from this study include:

1. Research designed to further expand the Model of Pharmacist Interceding. That is, specific research should be undertaken to expand and better understand each component of the Model.

2. Research designed to develop processes that pharmacists may use to assess the needs of their customers.

3. Research designed to develop interventions that will teach the pharmacist to recognize and act on their customers' needs.

4. Research designed to develop an understanding of the relationships formed by pharmacist interceding.

5. Research designed to develop qualitative evaluations of pharmacist interceding.

6. Research designed to develop methods to educate customers in the specific way(s) that their pharmacist(s) may intercede, so that the customer may (1) clearly articulate their needs and (2) better understand their rights in the medication uses system.

In closing, the Model of Pharmacist Interceding, as presented in this research, illustrates a substantive theory of customer expectations of community pharmacy services. The Model not only explains those customer expectations (i.e., that their pharmacist will intercede) but also provides descriptions of the processes that lead to and from those expectations. The usefulness of the Model may be found in this thick description and analysis that creates a clearer theoretical understanding of customer expectations of community pharmacy services.

REFERENCES

Banahan, B.F., Sharpe, T.R., & Smith, M.C. (1980). Consumer Expectations Compared to the Reported Use of Pharmacy Services in Rural Areas. Contemporary Pharmacy Practice, 3, 90-94.

Blumer, H. (1969). Symbolic Interactionism: Perspective and Method. Englewood Cliffs, NJ: Prentice-Hall.

Bolton, R.N., & Drew, J.H. (1991). A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes. Journal of Marketing, 55, 1-9.

Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. (1993). A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions. Journal of Marketing Research, 30, 7-27.

Brown, L. (Ed.). (1993). The New Shorter Oxford English Dictionary. Oxford: Clarendon Press.

Christensen, D., & Penna, P. (1995). Quality Assessment and Quality Assurance of Pharmacy Services. In Principles and Practice of Managed Care (pp. 89-101). Alexandria, VA: Academy of Managed Care Pharmacy.

Council on Medical Service. (1986). Quality of Care. Journal of the American Medical Association, 256, 1032-1034.

Cronin, J.J., & Taylor, S.A. (1992). Measuring Service Quality: A Reexamination and Extension. Journal of Marketing, 56, 55-68.

Davies, A.R., & Ware, J.E. (1988). Involving Consumers in Quality of Care Assessment. Health Affairs, 8, 35-50.

DeSimone, E.M., Peterson, C.F., & Carlstedt, B.C. (1977). Pharmacist-Patient Interaction and Patient Expectations. American Journal of Pharmaceutical Education, 41, 167-177.

Dichter Institute for Motivational Research, Inc. (1973) Communicating the Value of Comprehensive Pharmaceutical Services to the Consumer. Washington, DC: American Pharmaceutical Association.

Georgescu-Roegen, N. (1958). The Nature of Expectation and Uncertainty. In M.J. Bowman (Ed.), Expectations, Uncertainty, and Business Behavior (pp. 11-29). New York: Social Science Research Council.

Glaser, B.G. (1978). Theoretical Sensitivity. Mill Valley, CA: The Sociology Press.

Glaser, B.G., & Strauss, A.L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. New York: Aldine De Gruyter.

Hepler, C.D., & Strand, L.M. (1989). Opportunities and Responsibilities in Pharmaceutical Care. American Journal of Pharmacy Education, 53, 7S-15S.

Holdford, D., & Schulz, R. (1999). Effect of Technical and Functional Quality on Patient Perceptions of Pharmaceutical Service Quality. Pharmaceutical Research, 16, 1344-1351.

Hutchinson, S.A. (1988). Education and Grounded Theory. In R.R. Sherman & R.B. Webb (Eds.), Qualitative Research in Education: Focus and Methods (pp. 123-140). New York: The Falmer Press.

Hutchinson, S.A. (1993). Grounded Theory: The Method. In P.L. Munhall & C.O. Boyd (Eds.), Nursing Research: A Qualitative Perspective (pp. 180-212). New York: National League for Nursing Press.

Iacobucci, D., Ostrom, A.L., Braig, B.M., & Bezjian-Avery, A. (1996). A Canonical Model of Consumer Evaluations and Theoretical Bases of Expectations. Advances in Services Marketing and Management, 5, 1-44.

Kaplan, S.H., & Ware, J.E. (1995). The Patient's Role in Health Care and Quality Assessment. In N. Golfield & D.B. Nash (Eds.), Providing Quality Care (pp. 25-52). Ann Arbor, MI: Health Administration Press.

Knapp, D.E., Knapp, D.A., & Edwards, J.D. (1969). The Pharmacist as Perceived by Physicians, Patrons, and Other Pharmacists. Journal of the American Pharmaceutical Association , NS9, 80-84.

Kucukarslan, S. (1998). Identifying Patient Needs in the Context of the Medication Use Situation. Journal of the American Pharmaceutical Association, 38, 440-445.

Lincoln, Y.S., & Guba, E.G., (1985). Naturalistic Inquiry. Beverly Hills, CA: Sage.

Ludy, J.A., Gagnon, J.P., & Caiola, S.M. (1977). The Patient-Pharmacist Interaction in Two Ambulatory Settings. Drug Intelligence and Clinical Pharmacy, 11, 81-89.

Mackowiak, J.L., & Manasse, H.R. (1984). Expectations for Ambulatory Services in Traditional and Office-Practice Pharmacies. American Journal of Hospital Pharmacy, 41, 1140-1146.

Mackowiak, J.L., & Manasse, H.R. (1988). Expectation vs. Demand for Pharmacy Service. Journal of Pharmaceutical Marketing & Management, 2, 57-72.

Maxwell, J.A. (1996). Qualitative Research Design An Interactive Approach. Thousand Oaks: Sage Publications.

Nau, D.P., Ried, L.D., Lipowski, E.E., Kimberlin, C., Pendergast, J., & Spivey-Miller, S. (2000). Patients' Perceptions of the Benefits of Pharmaceutical Care. Journal of the American Pharmaceutical Association, 40, 36-40.

Norwood, G.J., Seibert, J.J., & Gagnon, J.P. (1976). Attitudes of Rural Consumers and Physicians Toward Expanded Roles for Pharmacists. Journal of the American Pharmaceutical Association, 16, 551-554.

Oliver, R.L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Dimensions. Journal of Marketing Research, 17, 460-469.

Oliver, R.L. (1993). A Conceptual Model of Service Quality and Service Satisfaction: Compatible Goals, Different Concepts. Advances in Services Marketing and Management, 2, 65-85.

Oliver, R.L., & Winer, R.S. (1987). A Framework for the Formation and Structure of Consumer Expectations: Review and Propositions. Journal of Economic Psychology, 8, 469-499.

Olson, J.C., & Dover, P.A. (1979). Disconfirmation of Consumer Expectations Through Product Trial. Journal of Applied Psychology, 64, 179-189.

Parasuraman, A., Berry, L.L., & Zeithaml, V.A. (1990) An Empirical Examination of Relationships in an Extended Service Quality Model (Report No. 90-122). Cambridge, MA: Marketing Science Institute.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. Journal of Marketing, 49, 41-50.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A multi-Item Scale for Measuring Consumer Perceptions of Service Quality. Journal of Retailing, 64, 12-37.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1991). Refinement and Reassessment of the SERVQUAL Scale. Journal of Retailing, 67, 420-449.

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1994a). Alternative Scales for Measuring Service Quality: A Comparative Assessment Based on Psychometric and Diagnostic Criteria. Journal of Retailing, 70, 201-230.

Parasuraman, A., Zeithaml, V. A., & Berry, L.L. (1994b). Moving Forward in Service Quality Research: Measuring Different Customer-Expectations Levels, Comparing Alternative Scales, and Examining the Performance-Behavioral Intentions Link (Report No. 94-114). Cambridge, MA: Marketing Science Institute.

Patton, M.Q. (1980). Qualitative Evaluation Methods. Beverly Hills, CA: Sage.

Pisano, D.J., Tocco, M.J., & Vogenberg, F.R. (1997). Performance Improvement: The Changing Valuation of Pharmaceutical Care. U.S. Pharmacist, 22, 103-114.

Ranelli, P.L., & Coward, R.T. (1997). Communication Between Pharmacists and Patients: The Role of Place of Residence in Determining the Expectations of Older Adults. Pharmacotherapy, 17, 148-162.

Sirdeshmukh, D., Pathak, D.S., Kucukarslan, S., Segal, R., Kier, K.L., & Aversa, S.L. (1991). Patient Satisfaction/Dissatisfaction and Post-Exchange Actions in the High-Blood Pressure Prescription Market: A Preliminary Report. Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior, 4, 84-92.

Spreng, R.A., & Mackoy, R.D. (1996). An Empirical Examination of a Model of Perceived Service Quality and Satisfaction. Journal of Retailing, 72, 201-214.

Swartz, T.A., & Brown, S. W. (1989). Consumer and Provider Expectations and Experiences in Evaluating Professional Service Quality. Journal of the Academy of Marketing Science, 17, 189-195.

Wiederholt, J.B., & Rosowski, P. (1996, February). Antecedents of Expectations for Pharmacist Information Services. Paper presented at the American Marketing Association Winter Educators Conference, Hilton Head, S.C.

Woodruff, R.B., Cadotte, E.R., & Jenkins, R.L. (1983). Modeling Consumer Satisfaction Processes Using Experience-Based Norms. Journal of Marketing Research, 20, 296-304.

Zeithaml, V.A., Berry, L.L., & Parasuraman, A. (1988). Communication and Control Processes in the Delivery of Service Quality. Journal of Marketing, 52, 35-48.

Zeithaml, V.A., Berry, L.L., & Parasuraman, A. (1991). The Nature and Determinants of Customer Expectations of Service (Report No. 91-113). Cambridge, MA: Marketing Science Institute.

Zeithaml, V.A., Berry, L.L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. Journal of Marketing, 60, 31-46.

APPENDIX A
INITIAL INTERVIEW GUIDE

1. Please think about your last visit to a pharmacy to pick up a prescription. You arrived at the pharmacy and opened the door. What happened next? What did the pharmacy look like? Where were the people? Who were the people? What were you doing? What were they doing? What was said? When was it said? What was the most important thing that happened during your visit?

2. When you need a prescription, what are your minimum expectations of a pharmacy? What about the facilities? Services? Personnel?

3. Now imagine the ideal pharmacy visit in your eyes. Please describe an ideal visit to that pharmacy. How is it different than the minimum you described a minute ago? Facilities? Services? Personnel?

4. Please think about a pharmacy visit when your expectations were not met. What happened? What was different? Who was involved? Facilities? Services? Personnel?

5. Are there any times when your expectations might be different?

6. Have you ever had a change in your health plan that necessitated a change in pharmacies? How did you choose the new pharmacy? What were your expectations for service in that new store? Facilities? Services? Personnel?

7. Suppose you move to a new town. How do you choose a new pharmacy? Why?

8. Suppose someone asked you for a recommendation. Describe the pharmacy that you would recommend. Facilities? Services? Personnel?

9. Do you currently patronize one pharmacy? More? Why?

APPENDIX B
REVISED INTERVIEW GUIDE

1. Please think about your last visit to a pharmacy to pick up a prescription. You arrived at the pharmacy and opened the door. What happened next? What did the pharmacy look like? Where were the people? Who were the people? What were you doing? What were they doing? What was said? When was it said? What was the most important thing that happened during your visit? What was missing in regards to the people, facilities, pharmacist?

2. What should happen when you visit your pharmacy? Why? (Facilities, People, Services)

3. What should NOT happen when you visit a pharmacy? Why? (Facilities, People, Services)

4. Please think about a pharmacy visit when things did not go as you wished. What happened? What was different? Who was involved? Facilities? Services? Personnel?

5. Now imagine the ideal pharmacy visit in your eyes. Please describe that ideal visit to the pharmacy. How is it different than a "usual" visit to the pharmacy? Facilities? Services? Personnel?

6. Are there any times when your expectations might be different? For example a new vs refill prescription, chronic vs acute illness, or emergency vs not emergency visit.

7. Think back to the first time you remember having a prescription filled. What happened? What was missing? What was the prescription for? A chronic vs acute illness? How did you feel? What is the most important thing that happened?

8. Describe your experience as a pharmacy customer. Do you have an acute or chronic illness? How long since your diagnosis? How often do you visit a pharmacy? Do you shop at a chain, clinic, and/or independent pharmacy?

9. How does having to take a prescription make you feel?

10. What is the "worst" thing about having to take prescription medication. The best? How could it be better?

11. What is the most important thing that your pharmacy can do for you? The least important?

12. Have you ever had a change in your health plan that necessitated a change in pharmacies? How did you choose the new pharmacy? What were your expectations for service in that new store? Facilities? Services? Personnel?

13. Suppose you move to a new town. How do you choose a new pharmacy? Why?

14. Suppose someone asked you for a recommendation. Describe the pharmacy that you would recommend. Facilities? Services? Personnel?

15. Do you currently patronize one pharmacy? More? Why?

16. How would you describe yourself in regards to your illness? For example, are you proactive, passive, aggressive?

APPENDIX C
DEMOGRAPHIC AND PHARMACY EXPERIENCE QUESTIONS

1. In what month and year were you born?_____

2. Occupation: _____

   Retired from that occupation? Yes ____ No ____

3. Highest grade of school or college that you have completed:_____

4. Pharmacy Experience:

   Number of prescriptions per month: _____

   How often do you visit a pharmacy?

   Weekly Monthly Quarterly Yearly Other: _____

   How many years have you been purchasing prescriptions on own? _____

   Type of store patronized: Chain Independent Clinic Other_____

   Do you have a chronic illness? _____

   Type of chronic illness: _____

   How long since diagnosis? _____

   Onset of illness Sudden Gradual Other_____

5. How do you categorize your health status?

   Poor Fair Good Excellent

6. How do you pay for your prescriptions? Self Share Others

BIOGRAPHICAL SKETCH

Born in Camp Lejeune, North Carolina, Barbara Brice lived in the South and on the island of Okinawa before her parents settled in Florida in 1972. She received a Bachelor of Arts degree in marketing from the University of South Florida in 1981, and a Master of Health Administration degree from the University of North Florida in 1993. Since 1984 Barbara has co-owned and managed the Medicine Shoppe Pharmacy in Jacksonville, Florida, with her husband Lee, a Gator Pharmacist. Together they are raising two children, Kate and Rob. Barbara will earn her Doctor of Philosophy degree from the University of Florida in May 2000, and plans to pursue a career in research and teaching.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Earlene Lipowski, Chair
Associate Professor of Pharmacy
Health Care Administration

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Carole Kimberlin
Professor of Pharmacy Health Care
Administration

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Richard Segal
Professor of Pharmacy Health Care
Administration

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Sally Hutchinson
Professor of Nursing

This dissertation was submitted to the Graduate Faculty of the College of Pharmacy and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

May 2000

Dean, College of Pharmacy

Dean, Graduate School

UNIVERSITY OF FLORIDA
3 1262 08555 2759